

THE
Chicago Medical Journal.

A MONTHLY RECORD OF

Medicine, Surgery, and the Collateral Sciences.

EDITED BY J. ADAMS ALLEN, M.D., LL.D.; AND WALTER HAY, M.D.

VOL. XXVII.—JANUARY, 1870.—No. 1.

Original Communications.

ARTICLE I.—*A Brief Review of the Natural Supports of the Uterus, with Certain Inferences therefrom.* By H. WEBSTER JONES, M.D., Accoucheur to Cook County Hospital, and Clinical Lecturer upon the Diseases of Women.

It is proposed in the present paper, to review, very briefly, the supports of the uterus, with the hope of securing more definite ideas of nature's purposes concerning that organ. It is believed that the hints deduced from such an inquiry may not be unavailable to the student and practitioner.

First, the *ligamenta lata* interest in respect to their *breadth*; their *origin*, oblique as compared with the axis of the body, but parallel with that of the superior pelvic strait, and finally, their *office* as blood and nerve conveyers to and from the uterus and its appendages.

By a *breadth* as great as the uterine length they, in health, insist upon a parallelism between that viscus and their own origin.

Their obliquity, therefore, determines the direction of the uterine axis, while their central origin preserves its body from an

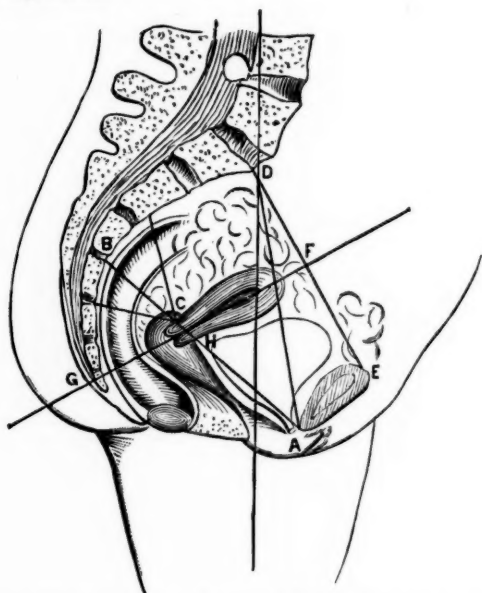
infringement, on the one hand, upon the bladder, and on the other, upon the *cul-de-sac*, whose intestinal contents should form one of its strongest safeguards.

The *office* of these ligaments, when retroversion of the uterus has occurred, is interfered with, much as if their vessels and nerves had been subjected to "torsion" by the forceps of the surgeon.

Second — The *cervico-sacral* ligaments are of great importance, as conservators of the uterine balance.

These are notable in respect to their *line of tension*, their *normal length*, and finally, their *attachment*, which is less to the uterus itself than to the *vaginal cul-de-sac*.

Applying the law of the "composition of forces" to these ligaments, they are found to form, together with the upper vaginal wall, a *chord*, whose arc is composed of the sacral curve (below the third bone), the coccyx and perineal muscles, ending in the sub-pubic ligament.*



* The above Diagram is based, geometrically, upon the researches of Professor Hodge, who seems to have devoted much time and pains to the attainment of exact ideas, in regard to the relative distance and place of the pelvic structures and organs.

A line A C B represents the chord mentioned, and A G B is its arc. The former will be found very nearly coincident with the superior vaginal wall, A H, its line of cervical attachment, H C, and the line C B, representing the direction of the composite cervico-sacral force.

The *normal length* of these supports must evidently conform to the distance of the sacrum from the intersecting transverse plane of the pelvis, in which the *broad ligaments* lie, less half the thickness of the *cervix uteri*. The line B C indicates this distance.

In a standard pelvis, Professor Hodge gives the diameter A C B as four inches and eight lines. Professor Meigs (*Diseases of Woman*, p. 208) says that the distance of the cervix from the sacrum ought to be from *one to one and a half inches*, and that the vaginal length (measured upon the line A C) should be *three inches and a half*. Allowing one inch as the thickness of the cervix, we have *two inches and a half* as the length of the upper vaginal column, H A.

Again, the fact that these ligaments are attached mainly to the vaginal *cul-de-sac*, rather than to the uterus or its neck, shows that *when normal*, they separate the vagina from the cervix, posteriorly, as do the broad ligaments laterally, and the rectum inferiorly, so as to constitute a reservoir whose walls neither lie in contact with themselves, nor with the cervix uteri.

Third — It is apparent to the most cursory observer, that the *round ligaments*, by reason of their circuitous route and the angle at which they meet the uterus, can exert no influence in preventing a descent of that organ in its own axis.

But, for the same reason, and because of their muscularity and elasticity, they greatly conduce to the constant parallelism of the uterus with the origin of the *broad ligaments*, and prevent the occurrence of a *retroversion*.

Together with the soft cushion of intestines in Douglas' *cul-de-sac*, they form the normal antagonism of the bladder, in its tendency, when full, to project the womb backward.

Fourth—The peritoneal attachments of the bladder and uterus, by some termed the *utero-vesical ligaments*, serve to make the movements of these organs, to a large extent, mutual, and explain some of the sympathies which exist between them.

Fifth — The *vagina* and *perineal muscles* are important adjuncts to the uterine balance.

The former is such simply and *only* because it forms part of the chord A H C B.

By the elasticity of its upper wall, it preserves a due extension of the *cervico-sacral ligaments* and the cervix, at a proper distance from the arc A G B. The distance F G (or the pelvic *depth*) is stated by Professor Hodge, as four inches and six lines, and he gives the length of the uterus as two inches and a half.

Allowing six lines for the distance between the plane of the superior strait and the *fundus uteri*, we then have, approximately, one inch and a half as the elevation of the *os uteri* above the arc mentioned.

Given the pelvic diameters as stated, and the uterine and vaginal dimensions, as indicated by the above well-known authorities, and it is impossible for the vagina to meet the uterus otherwise than at an *acute angle*; it cannot, then, form a "columnar pedestal," upon which the latter may rest.

The *levator ani* muscle, in transit from its anterior origins, embraces the vagina obliquely, just behind its proper sphincter.

By a few muscular fibres sent off to the upper wall of that canal, it assists in maintaining proper tension; and, by similar union with the lower wall, it conduces to the apposition of the two.

The perineal muscles cannot act *directly* upon the womb, unless that organ has *lapsed* a full inch and a half, or lies *retroverted* upon the rectum.

They form a *corps de reserve*, useful indeed, in all violent depressions of the abdominal and pelvic contents from external force.

The pelvic fascia and interstitial cellular tissue contribute to the general strength and safety of the supports enumerated.

The following reflections are incident upon this view of the subject:

1st. The uterus is intended to observe certain relationships to other organs; in fact, to possess a *normal position*, having variations which are limited in extent.

2nd. The uterus, like other bodies whose main support is below their centre of gravity, is liable to divergence from its normal position.

3rd. Anatomically, it is least protected from an *anteversion* (or flexion), for the uterine axis is obliquely forward, as regards the force of gravity, and it sustains, upon its posterior and upper wall, some of the weight of the intestines. Moreover, there are no *fundo-sacral* ligaments; and the bladder, generally empty, or nearly so, is the sole antagonist of the round ligaments.

Among one hundred and fourteen women examined, by M. Panas (*vide* "L'Union Medicale"), one-third were subjects of these errors in place; and they were mainly young, unmarried or non-parturient, and therefore, less liable to accident.

Inferentially, this diversion should be attended by less physical annoyance than its opposite state. Torsion of the *broad ligaments* can here only reach over an arc of 35° , and is not necessarily obstructive.

4th. In her defences against *retroversion*, nature has spared no pains. The round ligaments above and in front, and the cervico-sacral below and behind, not to speak of the obliquity of the broad ligaments and the intestinal compress in Douglas' *cul-de-sac*, all fortify the uterus most evidently, in this direction. The cervix kept within an inch and a half of the sacrum, and the round ligaments preserving a fundo-pubic distance of two inches and a half, no retroversion *can* occur. (Meigs, Woman and Her Diseases, p. 208.)

Inferentially, this displacement is far more serious in its results than any other. Torsion of the broad ligaments may here extend over an arc of 160° , obstructing the venous channels, giving rise to congestions, ovarian and uterine, and by impeded or distorted reflex action, originating hypertrophies, hyperæsthesias, and disturbances of the menstrual function.

Such is the success of fashion, as arrayed against nature, that "seventy-five per centum of uterine disorders and displacements consist in retroversion of the womb," (*loc. cit.*)

5th. The uterus can descend in its own axis, (*i. e.*, "*lapse*") but *one inch and a half*.

It can be moved forward, its obliquity being preserved ("*prolapse*") not more than two inches and a half.*

* The writer considers that any divergence of the upper uterine axis backward, so far as, or beyond a parallelism with the vertical axis of the body, derivatively speaking, a "*retroversion*."

6th. Inferentially, the *os uteri* was not intended to impinge upon the pelvic floor.

Still less should it rest upon foreign bodies of greater firmness and resistance.

7th. The vagina is intended as a *reservoir*.

Retroversion and prolapse rob it of its receptive and retentive powers, and diminish the probability of conception.

Anteversion has less of this tendency.

8th. The fact that the *cervix uteri* "falls easily" into the mouth of a speculum, is corroborative of a tendency to retroversion, the normal angle of incidence of uterus upon vagina being about 70° — an *acute* angle.

9th. No pessary should fix the womb *immovably*, or elevate the *os uteri* more than one inch and a half (to two inches?) above the perineal structures, or force the *cervix* backward more than two inches and a half from the pubis. The point C (*vide* diagram) may be thus held at a distance of three and a half inches.

Any abdominal compress, however constructed or applied, forces the intestines in the direction where there is least resistance; will inevitably and in time overcome the elasticity and tone of the uterine supports, muscular or ligamentous, causing *lapse* and *prolapse*, and when a degree of *retroversion* exists, will certainly increase its extent, and hasten the evils which attend thereupon.

Finally, artificial supports for the uterus should always harmonize with Nature's provision for the safety of tissues, the propagation of the species, and the comfort, bodily and mental, of the patient wearer.

ARTICLE II. — *On Life, from a Physical Basis; and some Qualities or Phenomena, which are thought to be Peculiar to Life, and Irreconcilable with Physics.* By Z. C. McELROY, M.D., Zanesville, Ohio, President Muskingum County Medical Society.

THE qualities possessed and phenomena developed by human beings and other organized bodies, and the qualities and phenomena of inorganic matter on their surfaces, present few points of resemblance. Observers, from the remotest antiquity, have

all, or mainly all, united in attributing certain phenomena to an unknown force, or something, which they designated as "vitality," "vital force," or "vital principle," or "life." Its existence was inferred from the phenomena of life, and the qualities and phenomena possessed by living beings were admitted to demonstrate its existence.

Doubters may, perhaps, have existed, from time to time, of this philosophy; but, if so, they failed to make any impress on current science or thought, until a very recent period. But they do exist now, and though their numbers may be few, they will not likely ever be any less.

In this iconoclastic movement, the Muskingum County (Ohio) Medical Society is entitled to whatever merit may hereafter attach to the initiative, or the dishonor attached to failure, in endeavoring to bring the phenomena of organic life, in health and disease, squarely within the pale of physical or exact science, and the dethronement of the imaginary idol of "vitality," as a superterrestrial force, which has so long swayed the minds of scientific investigators of the material and forces of organic life.

But its membership is, by no means, a unity in the matter; while all admit, perhaps, that some of the phenomena of organic life may be due to the operation of the ordinary physical forces of nature, there are others who think that living beings possess some qualities, which, in themselves, are peculiar, and irreconcilable with any ideal of life from an exclusively physical basis. Thus, at a recent meeting, one of its members read an elaborate, carefully-studied, able and dignified paper, opposed to a physical basis of life, and summing up the following qualities as points for which physical science offered no explanations:*

"But, allow me to mention some qualities which are peculiar to life, viz.:

1st. Activity: contra distinguished from simple motion, and this presenting often as opposed to the "physical forces."

2nd. Individuality; which causes even like particles of matter to present different features.

3rd. Reproduction; or perpetuation of individuality.

4th. Immutability; or the maintenance of "life," notwith-

* Copy furnished me by the author.

standing all the molecular changes which take place in an organic body.

5th. Sensation ; or the appreciation of bodily states and wants.

6th. The quality of Perception.

7th. The quality of Instinct ; and, in man,

8th. The faculty of Reason ;

9th. The faculty of Consciousness ;

10th. The Will, and mental and moral phenomena in general."

These are strong points, well and wisely chosen, and if they cannot be reduced to simple physical elements, and shown to have their manifestations due to the operations of ordinary chemical and physical law, the attempt to construct a physical basis of life has been undertaken without sufficient knowledge, and must be considered a failure. It will, therefore, be needful to analyze each of these ten qualities separately, and ascertain whether they can be reduced to simpler elements than appear on their surfaces.

1st. Activity, and "as contradistinguished from simple motion." Activity, if it has any meaning at all, is rather a quality of motion than anything distinct from motion. It is, in fact, motion—nothing more, nothing less—if it represents any thing else than a quality of motion ; and, in organic life, is certainly due to correlations of the ordinary physical forces of light, heat, electricity, etc., etc. It seems to me quite unscientific to invent causes, when those already in actual existence are at hand to account for any or all of the qualities or phenomena of "life." The simplest element therefore of activity is motion.

3rd. Individuality. That is, separate and distinct existence. The wheaten loaf is certainly the formless protoplasm of all animal tissues ; that is, man and beast, bird and worm, fish or insect—the most diversified distinct existences—may eat from the same wheaten loaf, and at will make their tissues ; that is, their separate existences. Hence, their individuality must consist in something else than matter, for the same first matter of life enters into them all ; and the simplest element, therefore, of individuality must be in form, or forms. Thus, the difference between bone and brain matter is certainly very striking, yet that difference is due to form, and not to the material of which each is composed ; for, in different proportions, probably, their ultimate

elements are the same. Nor is the resemblance between the human infant, deriving its whole sustenance from its mother's milk, and the mother's milk, any nearer; yet the tissues of the infant have certainly been constructed from its mother's milk; and the difference between them is principally in their forms. Again, the material of the pen which traces the manuscript from which this article is printed, existed, possibly, at one time, in combination with quartz rock in California. It was gold then, and is gold still. After passing through many metamorphoses, it has become a pen, and the feature which distinguishes it from the gold from which it was made, is its form. The simplest element, therefore, of individuality is form.

4th. Reproduction. In organic life, no one expects, because such things have never happened to any one's knowledge, that in the act of reproduction, an elephant should give birth to a chicken, for example, or to perpetuate any other than its own general forms. Hence, reproduction, stated in its simplest terms, consists in form and motion.

5th. Immutability. Maintenance of form with incessant, or, perhaps, frequent molecular changes. The simplest statement of immutability, as applied to the maintenance of life or form, is form; and is due to the operations of what the writer has designated as the "form force" of organic life.* But the records of morbid anatomy unhappily show that organic forms fall short of immutability; for if the forms of organic life were really and truly immutable (in the ordinary meaning of the word); that is, always maintaining "life" or "forms," organized bodies would be immutable, and, in addition, possess another quality, to-wit: immortality. These would be, because there could be neither disease, old age, or death; for these are due, taking the testimony of pathology and morbid anatomy to (in their phraseology) changes of structure, which is, again, simply changes of form. For if the forms of organic life were always maintained intact, the vocation of the physician would as certainly cease as the vocation of Demetrius† ceased with the worship of Diana. The simplest element of immutability, as here used, is form.

* "Western Journal of Medicine," September, 1869.

† Acts of the Apostles, xix. 27.

5th. Sensation. That is, sight, hearing, touch, taste, smell, hunger, thirst, ease, pain, etc., etc. For the appreciation of these, or any other bodily states or wants, taking the testimony, again, of anatomy and pathology, a nerve or brain-like mass or patch is necessary, as well as nerve-chords and motion, in their molecular structure or particles. It, therefore, only requires the bare statement, to prove that these states and wants are all reducible to form and motion; for a change of form in the eye, for instance, if to any considerable extent, involves the loss of vision. And this is equally true of all the other organs of sensation. The simplest elements of sensation are, therefore, form and motion.

6th. Perception. That is, knowledge through the medium, or instrumentality of bodily organs. Bodily organs must have form, and motion must occur in their molecular structure, or perception cannot take place. Perception, then, is reducible to form and motion; a cessation of motion is death, and surely dead organic bodies do not perceive.

7th. Instinct. That is, a certain power, independent of all instruction or experience, by which animals are directed to do, spontaneously, without having any end in view, whatever is necessary for the preservation of the individual, or the continuation of its kind. Instinct depends, as demonstrated by both anatomy and pathology, on patches or masses of brain-like matter, and is to be regarded, if regarded on its facts, as any other organic function. Living things are said to be born with instinct; which is true — just as true as that they are born with vision, hearing or digestive apparatus. No human infant has to be taught to see, or hear, or digest proper food. These are the conditions of its life. No living being exhibits what is called instinct, except it has a mass or patch of brain-like matter, which evolves what is called instinct, just as the liver evolves bile; and no one, to my knowledge, has ever thought it necessary to open schools for the purpose of teaching livers to secrete* bile. Instinct, then, is the evolution of masses or patches of brain-like matter, which depend, for the performance of their functions, on form and motion, just as the eye or ear, or liver, or kidneys, or lungs.

* The word "*secrete*" is used, not because it is believed to be properly applied to any organic function. Indeed, it is a most mischievous word in physiology, for the reason that the mental impression produced by the word does not correspond with the facts of life.

Instinct differs from intellection, in that intellection depends, so to speak, on added brain matter, or by culture or education giving the forms to brain-matter from which intellection springs. Hence the necessity of teaching intellection to the young, while brain matter can be given the requisite form, or added; for if delayed till after adult life, these forms are produced with much greater difficulty, as all experience proves, and not unfrequently it is impossible. The proverb that "instruction is for the young," has its foundation in physiological truth. Possibly this fact may account for the difficulty my friend finds in understanding life from a physical basis, instead of a metaphysical, as we were both taught when medical pupils, and probably before.

Instinct, then, is clearly reducible to form and motion.

8th. Reason. That is, to reduce inferences justly from premises. To reason justly, is to infer from propositions which are known, admitted, or evident, the conclusions which are natural, or which necessarily result from them.

Reason is one of the faculties of the intellect, and as reason depends on brain matter, having a definite and peculiar form, and can only be manifested by motion in its molecular structure, this, like all the preceding, is reducible to the two simple physical elements of form and motion.

9th. Consciousness. That is, the knowledge of sensation and mental operations, or what passes in one's own mind. This, like the last, depends on brain matter; that is, form, manifested, like reason, by motion in its molecular structure. It is, therefore, also, merged into the two simple physical elements of form and motion.

10th. The Will, and mental and moral phenomena in general. That is, the faculty of mind by which we determine to do or forbear an action. The will, like consciousness, depends on brain matter, having a definite and peculiar form, and can only be brought within our comprehension by motion in its molecular structure or particles: is one of the intellectual faculties, and as intellect depends on added brain matter, or by culture and education giving the requisite form to brain matter, this, too, like all the preceding, is reducible to the two physical elements of form and motion.

It is seen, therefore, that all the phenomena of organic life, like

all the phenomena observed in inorganic matter, are reducible to the two simple physical conditions of form and motion. And however else they may be viewed, metaphysically, must, nevertheless, be studied on their facts alone, by the physical philosopher. The physical conditions for their manifestation are form and motion, and these properties are all that concerns the pathologist and therapist. By remedial agents, our power over forms in organic life is *nil*; but over motion, considerable. The management of lost types or forms falls within the province of the surgeon, whose sole power lies in their destruction, when their destruction does not involve life. The surgeon cannot, for example, remove, that is, destroy, an enlarged heart; that is, a heart that has lost its normal form, with any expectation that the patient would survive, even when closing the necessary wounds in the integuments, no matter how expeditious he went about it. But the physician may, by many agents and expedients, prolong life, by complying with the inexorable laws governing lost forms, and, consequently, imperfectly performed function.

The structural unit of animal organic life, is a sac or cell, containing a fluid and a granule. Or the granule or crystal, that is form, may be so regarded. It is a further fact, that the germ is also a sac or cell, containing a fluid and a granule. It may be regarded, therefore, as tolerably certain that the form force is, in some way, identified with the granule or crystal. It may be further regarded as tolerably certain that the material of the germs, for the most diversified forms of life, have, to a great extent, an identity; *i. e.*, that they are composed of the same ordinary inorganic matter, and the physical forces are indispensable for their evolution. A human being is thus complex: 1st. Inorganic matter; 2nd. Physical forces; 3rd. Form force; 4th. Spirit or life.

It is quite probable, and indeed is the present tendency of science, to refer all organic forms to some mode or correlation of the physical forces, operating as one great law or force. The human or living being would then be a triple compound of matter, physical force, and spirit.

But the simplest elements of all animal life, or, for that matter, all organic life, are form and motion; and these forms and motions can only be made manifest to our senses through material

common, in all probability, to the universe; for recent scientific investigations have demonstrated the identity of some of the solar and planetary with the inorganic matter of the earth. And it is quite certain that the source of all power is the sun. So that all that is super-terrestrial in the human body is spirit, or, if it is preferred, say "life." But all that we can influence by therapeutic, remedial, or hygienic agencies, are its strictly terrestrial portions. The only way, therefore, in which it can be intelligently studied, for therapeutic and pathological purposes, is from a physical basis; and for the additional reason that when so studied, the facts of health and disease are correctly represented in the mental impressions so obtained.

Diverse, complicated and mysterious as appear the ten specifications of "qualities" peculiar to "life," enumerated by my friend, the analysis of the physical philosopher reduces them all to the same simple, understandable, physical phenomena of form and motion.

Each of the ten several qualities unquestionably depend, for their manifestation, on matter with certain forms, or, in other technology, certainly less definite, structure and motion; and motion as a correlation of the ordinary physical forces of inorganic nature.

Even while writing this short memoir, the *London Lancet* reaches me, with an article on "Granular Degeneration of Nerve Cells in Insanity," by the superintendent of a royal lunatic infirmary in Great Britain; and his facts are not guessed at, but obtained among the dismal yet instructive revelations of the dead-house. He says:

1st. He finds the "grey matter degenerated into fat" — that is, loss of form — "not only where acute mania was present, but in chronic general paralysis." "2nd. In all cases of long standing, the grey matter presents a granular appearance" — loss of form again, and with loss of form, loss of function forever. With the loss of form, several of the ten "qualities" "peculiar to life," so far as these insane patients were concerned, were stricken from the list. 3rd. "That similar granular" — that is, the blood plasma failed to reach any higher organization than what is called tubercular matter — "degenerations are found in and around all parts of the brain and spinal marrow."

These examples serve to show that each and all of these ten separate and apparently distinct "qualities," or phenomena peculiar to "life," are due to the operations of the ordinary physical forces, on the forms of organized inorganic matter; and whoever desires to reduce their phenomena to the simplest possible conceptions will, probably, like myself, find that it is in form and motion.

And furthermore, these two simple physical elements of form and motion embody the central ideals or units of organic life from a physical basis, and explain, in an understandable and intelligent manner, the *modus operandi* of all therapeutic, remedial and hygienic measures whatever. As motion is the central ideal unit of therapeutics, so, loss of form is the central ideal or unit of pathology; or, restricted to its narrowest possible limits, morbid anatomy. All the records of morbid anatomy can be merged into the central ideal of lost forms, and the only difference between the various physical appearances of lost forms, is merged into motion.

Thus, the calx substitutions for tissues of normal form so frequently found in the aged, differ from what is called fungus or cancer, found at all stages of life, solely in their motion. In the calx motion is reduced to its minimum; while, in the so-called cancer or fungus, it is at its maximum, and that maximum much greater than in tissues of normal form. And as motion is the simple unit of force, the active cancer, or fungus, destroys life with much greater certainty and rapidity than lost forms with intermediate grades of motion, as fat, fibrin, etc.

The classification of therapeutic agents,* submitted to you three years since, is thus demonstrated to be critically correct and scientifically accurate. Experience may render some subdivisions expedient, based on their influence on motion, but promoting and retarding constructive and destructive metamorphosis; or otherwise, nutrition and oxidation of the tissues (both being merged into motion), are the simple ultimate physical elements of all therapeutic, remedial and hygienic measures; or, in a wider sense, form and motion are the ultimate, simple physical elements of the forces and phenomena of organic life, thermal, sensory, emotional, chemical and intellectual.

* See "Chicago Medical Journal," March 1, 1869, p. 157.

Over the other ultimate simple physical element of organic life, to wit: forms, neither therapeutic, remedial, or hygienic agencies or measures, exercise other ultimate influence than destruction; which is, again, simply motion. All operative surgery is merged into the ultimate simple physical element of motion, in the destruction of lost forms.

In general pathology, the long list of the so-called diseases are merged into the same simple physical units of lost form and motion. All the so-called diseases, remedial only by surgical proceedings, are merged into the unit of lost forms. All the so-called exanthemata, as small-pox, scarlet fever, measles, etc., as well as the virus of serpents, insects and other animals; cutaneous diseases, so-called, syphilis, etc., are merged into the unit of form changes or forces, and, ultimately, into the simple physical unit, motion; and are brought within the domain of general pathology, in virtue of their power, as form forces, or modes of form force, to substitute their own, or some modification between their own, and the normal forms of human tissues. The whole catalogue of the so-called febrile diseases are merged into the modifications of the molecular arrangements of the normal form and motion of the tissues.

If there is a solitary fact in organic life, physiological, pathological, or therapeutical, which cannot be merged into these simple units of form and motion, it has escaped my scrutiny. As a simple, earnest seeker after truth, no fact, or facts, have been avoided, but each has been squarely faced, and none have been found irreconcilable with life from a physical basis exclusively.

Two cases coming under my professional notice, to-day, of very opposite characters, may be cited in illustration (29th December, 1869):

In consultation. Sarah, aged 8, has been sick, or noticed to be unwell for four days past. 9 o'clock, A.M., temperature 108; pulse 250; respirations 60; pupil dilated; eye globes deeply injected, and lids cement together, in a little while, with matter; tongue purplish red; throat not seen; is very impatient if disturbed; swallows as well as any human being can in her condition; skin covered with minute red dots, in places so closely packed together as to present a continuous scarlet surface. The diagnosis was scarlet fever; and the prognosis unfavorable. Ther-

apeutical indications, tonics, stimulants, and anodyne, to restrain excessive restlessness. Such is a statement of the case in the methods now in use by the profession. Can the phenomena of this case be reduced to simple understandable physical elements? It seems to me that each and every symptom can be merged into nothing else than motion. What is the significance of the temperature, circulation and respiration but motion? And motion at a velocity altogether incompatible with life for many hours, alone. Why this motion? Existing and accepted philosophy declares it to be due to the presence of the poison or virus of scarlet fever in the system. And how does the virus or poison of scarlet fever produce this excessive motion? In no other possible way than by changing forms; for, if the forms of the tissues were undergoing no changes, no such excessive motion could be developed. Then in reference to therapeutics, the word tonic is certainly misleading in producing mental conceptions corresponding with the facts and requirements of the case. It comes from tone, to strain, or stretch, in reference to strings, or wires, whose vibrations produce tones in musical instruments. If by any fanciful use of the imagination the phenomena of this child's case can be compared to the chords of a musical instrument, they will be found, indeed, sadly out of tune; but will straining or stretching help to restore them? Rather is not the simple scientific indication to retard motion? Again, the term stimulants comes from the word stimulate, literally, to goad, or urge on. In medicine, it is true, it is understood in the sense of increasing, temporarily, vital energy or force. But what, it may be asked, is there vital in phenomena of motion presented by this child? Will she be profited, or her chances of life increased by additional energy—that is motion? Surely, such a conception would be most absurd. The facts are that motion, physical motion, is already in excess, and the sole scientific indication is to “retard destructive metamorphosis” of tissue. Once more, in the technology in use by the profession, she would be designated as in a state of great “exhaustion.” Exhaustion literally means being deprived of strength, or spirits. Does it indicate exhaustion, that is, emptied, to have a temperature ten degrees above natural? Or for the heart to contract 250 times per minute? Rather are not the phenomena due to terrible energy? Motion incompatible with

the continuance of forms, owing to its velocity above the normal standard of human beings? At 6 P.M., nine hours after, the spirit of the little sufferer passed to its celestial abode; and the organized materials of her body given up to other physical motion, in putrefactive decomposition.

T. B. A.; aged 10. Well cared for; goes to school, and stands at the head of her classes nearly all the time; studies hard; eats but little, except cakes, candy, taffy, pies, etc. Has headache; temperature $98\frac{1}{2}$; pulse small in volume, and quicker than natural; skin pale, tongue red, and covered in middle with dark-brown fur; is, however, cheerful and pleasant; bowels sluggish; nothing could be ascertained in regard to renal discharges. The diagnosis of the parents was that she was bilious, and had the neuralgia. Mine was somewhat different. All the symptoms were merged into the unit of motion, which was certainly too rapid in her cerebral masses, as evidenced by the pain above the eyes, and the circulation. The pallor of the cutaneous surface indicated too little motion, and very likely retention of the results of tissue metamorphosis. A saline draught, to promote motion, was prescribed; and in the evening the child was better, with temperature $99\frac{1}{2}$, and pulse fuller and slower. A warm bath was prescribed before going to bed. Next morning, temperature $98\frac{1}{2}$. The indication was to increase motion in the interest of nutrition, or constructive metamorphosis, for which purpose iron, quinine and sulphuric acid were prescribed. To have honest food, and little or no trash. This evening, January 1, 1870, convalescent; exultingly tells me she has eaten a pound of beef-steak, to-day, but thinks it very funny she can't have candy, mince-pie, cake and hickory-nuts on New Year's day.

It seems to me, therefore, that these two simple physical elements of form and motion are the true foundations and corner-stones of a science of life, from a purely physical basis; and inasmuch as they absolutely cover the whole of the phenomena, or "qualities" of organic life, must, sooner or later, be so accepted by the scientific world, and sciences of physiology, pathology and therapeutics constructed in accordance; for the simple reason that they will be true, and correctly represent the facts of organic life to the mind of each student.

ARTICLE III. — *Cases in Surgery — Abscess in Long Bones.*

By H. O. HITCHCOCK, A.M., M.D., Kalamazoo, Mich.

CASE I. — Probable abscess of the humerus following a blow; caries of the whole bone; amputation at the shoulder-joint; recovery.

C. S., of Climax, Mich., suffered somewhat during his military service — 1862 to 1865 — from camp diarrhœa, but had pretty fairly recovered from its effects. In February, 1868, while at work drawing wood, he received quite a severe blow about mid-way of the right arm, not so hard, however, as to fracture the bone or greatly to contuse the flesh.

This was soon followed by severe, deep-seated pain, from the middle of the arm to near the elbow-joint. The pain was dull, heavy, and almost unendurable, and accompanied by considerable swelling, which was poulticed for a number of weeks, after which an abscess was opened near the elbow, which opening never healed. The discharge of large quantities of sanious pus did not wholly relieve the pain which then appeared to be in the bone itself.

The disease has been steadily progressing ever since — new sinuses now and then opening, but never healing.

In the summer of 1869 an attempt was made to remove a suspected sequestrum in the upper half of the bone; but the bone was found to be so extensively carious the attempt was abandoned, and the disease was allowed its natural progress, except as modified by constitutional treatment.

The patient came to my office October 22, when the arm presented the following appearance: Nearly complete ankylosis of the elbow joint, with several sinuses leading down to both condyles of the humerus, which appeared to be carious; several sinuses along the arm leading down to the excavated medullary cavity, with two at the inner aspect of the shoulder joint, with thickening of the bone throughout its whole extent, and great infiltration of the soft parts.

Diagnosis, from history and present appearance, "caries of the whole humerus taking its origin in periostitis or endostitis, or both, with probable abscess in the shaft of the bone."

As the patient's health was greatly suffering from the constant

irritation and discharge, and as the whole bone, including its articular ends, appeared to be carious, I advised immediate amputation at the shoulder joint. This operation I performed October 26, 1869, making the oval operation of Baron Larrey.

The operation was quite a difficult and bloody one, on account of the greatly thickened soft parts around the joint, all of the blood vessels being greatly enlarged. The head of the humerus was found to be entirely carious.

The patient, after the operation, rallied very well. He was left in the charge of Dr. Seeley, of Climax Prairie, who informs me that the wound was completely healed and the patient in good health one month after the operation.

CASE 2. — Probable abscess of the shaft of the femur after severe injury to the thigh, followed by internal necrosis, and extensive sub-periosteal abscess. Bone trephined. Cavity scraped. Recovery. P. V. W., a large, well-developed man, of 37 years, with no taint of syphilis or scrofula, a builder by occupation, presented himself at my office, Nov. 15, 1859, for examination and advice.

Five or six years previous, while raising the roof of a church, he received a severe raking injury in the right thigh, by the falling of heavy timbers upon its outer aspect. At the same time there was fracture and dislocation of the left ankle. The injury to the right thigh was considered by the surgeon then in attendance only muscular.

But a few weeks after the accident the patient began to suffer very severe pain in the right thigh, deep seated, as if in the bone. This, he says, was considered and treated as a rheumatic pain for three weeks, when, choosing to die rather than be in such agony longer, the patient insisted that his medical attendant should open it. This gave exit to a large quantity of sanious, watery pus, and afforded great relief to the patient. The cut of the knife has since that time remained as a sinus, continuing to discharge pus of the same character.

Six months after the accident the patient resumed, and has since continued, his occupation, though with much pain and great discomfort. While in the upright position, at first, but little oozing took place, but the lower half of the thigh would soon become swollen and painful, "as if," in his own expressive

words, "a dog were gnawing it." And when the abscess was nearly filled, every contraction of the muscles of the thigh caused the matter to flow from the sinuses. In hot days, in summer, this discharge was often immense, and at night he would close the labors of the day by evacuating the pus from the lower part of the thigh with his foot elevated. Such had been his life for five years.

On making, December 15, 1859, an incision ten inches in length between the biceps and vastus externus muscles, commencing one and a half inches above the knee-joint, the bone was found bare of its periosteum almost the entire length of the incision, and for more than one-half of the circumference of the bone. The surface of the bone was granular and somewhat crumbly. In the upper half of the middle third the femur seemed decidedly and somewhat abruptly enlarged, even to nearly twice its normal size. At this point of enlargement was found a round, as if smoothly bored, hole, about a quarter of an inch in diameter, leading to the medullary cavity of the bone. This hole was filled with a jelly-like substance, such as also covered the bone where denuded of its periosteum. The bone was, at this point, trephined, and a sequestrum, one inch long, by one-third of an inch wide, and one-sixth of an inch thick, was removed from the medullary cavity. The cavity was thoroughly cleansed by scraping away all granular and crumbly bone, as was also the denuded exterior of the bone, and in a few weeks the cure was complete.

About the time case No. 1 came under my notice, my eye fell upon the article of Dr. Geo. C. Blackman, in the October No. of the *American Journal of the Medical Sciences*, "*on certain points connected with the pathology and treatment of abscess in bone*;" and it seemed to me that the two cases above related, while contrasting with each other in many respects, are both typical cases to illustrate the history of abscess in bone when neglected.

Dr. Markoe, in a paper in the *New York Journal of Medicine*, May, 1858, on "Chronic Sinuous Abscess of Bone," as quoted by Dr. Blackman, describes a class of cases very like the above: "distressing, tedious, intractable;" "cases in which the inflammation of the bone begins as an acute attack, passing rapidly into suppuration, and in which the abscess, thus rapidly

formed, finds its way early to the surface, through the compact external shell of the bone, and is discharged, to the temporary relief of the sufferings of the patient, though it may be not greatly to his advancement towards a cure. * * * The opening not being free, and probably not being direct, accumulations of matter take place within the cavity, and new inflammations and suppurations are excited in the bone substance surrounding the original focus of disease; * * * and the bone is left perforated in all directions, by two, three, four or more, sinuses, generally all communicating with one another, and with a central excavation or chamber which marks the position of the original abscess."

The above quotation is a complete description of the history of the disease in the first case here reported.

The second case is in somewhat of contrast to this, for several reasons. The sinus in the bone was a direct and short one, and had the sinus in the soft parts corresponded exactly to that in the bone, the inconvenience to the patient would have been much less. But as the sinus in the soft parts was at some distance from that in the bone, the discharged matter dissected up the periosteum and made a large sub-periosteal abscess. Besides, in the second case, the bone around the sinus and abscess appeared to have become enlarged and eburnated, while that in the first case became carious.

This difference might have been owing to the difference in constitution and condition of the two patients at the time of the injury.

Mr. Hey, of Leeds, in his *Practical Observations in Surgery*, describes a case very similar to case 2. "I found," he says, "the periosteum diseased and thickened. The surface of the tibia was rough as far as the matter had covered it; and in the centre of the rough part there was a hole equal in bore to a goose's quill, which penetrated the bone transversely about a quarter of an inch." Mr. Hey, in this case, sawed out a wedge-shaped piece of bone, two inches in length, from the tibia, and thoroughly scraped and gouged out the diseased surface of the cavity, and his patient made a complete recovery.

In this case the pus seems to have been six weeks in coming to the surface, but was not opened till one year after. He says: "The pain was so great during this operation of nature, that, my

patient assured me, and that immediately after the removal of the carious part of the bone," (the operation was done before the days of chloroform) "that she had suffered more pain during the whole of the six weeks above mentioned, unless she was asleep, than I had caused during the operation necessary for removing the unsound bone." "It is surprising that such a perforation should have been made through so firm a part of the bone without any extensive caries in the lamella." "The perforation appeared as if it had been made with a gimlet."

Dr. Nathan Smith, in a paper on necrosis, in his *Medical and Surgical Memoirs*, edited by his son, Dr. Nathan R. Smith, referring to the acute inflammation which precedes the death of the bone, remarks: "When the shafts of the long bones are the seats of the disease, about the same time that matter is deposited beneath the external periosteum, there is formed a corresponding collection between the internal surface of the bone and the membrane surrounding the medullary surface, so that there exist two collections of matter, bathing the opposite sides of the walls of the bone. This fact, which I deem of great importance, as being essential to the correct treatment of the disease, I have ascertained, in repeated instances, by the operation which I have performed for its relief, namely, the trepanning the bone."

Dr. Blackman quotes several cases by Dr. Benjamin B. Simons, of South Carolina, in which he trephined bones for abscess, in various stages of the disease, in seven cases, all of which completely recovered.

In the first case reported in this article, had the humerus been trephined soon after the accession of the severe pain which followed the blow, in all probability the patient would have recovered with a sound and useful arm. In the second case, had the same operation been performed, a like result would probably have followed, and the patient been spared five or six years of great pain and discomfort.

These two cases teach us the great importance of distinguishing the symptoms which indicate abscess of the bones, and of prompt action for their relief. Here is a fine field for true conservative surgery, not to give the management of disease up to nature, but promptly, and in good time, to interpose a minor operation, so as to arrest the natural progress of disease, and to prevent the

necessity of a more formidable operation, and the loss of limb and of life.

ARTICLE IV. — *Venereal Excess, with Mental Impairment.*

By JAMES S. WHITMIRE, Metamora, Illinois.

THERE have been, during the last few years, under my notice, several cases of diseases of the genital organs produced from excess, or rather their abuse; three of which presented different degrees of mental manifestations of derangement, all originating, probably, from the same cause, and resulting in physical and mental depravity.

The first, J. P., aged 26, farmer, married six years, and the father of two children. He consulted me during the month of March, 1867. He had a wild look out of his eyes, which were unsteady and vacant, and had a firm conviction that he had disease of the heart, which, he said, pained him, and insisted that it was swelled, and he maintained, persistently, the idea of impending dissolution. He was afraid to sleep; there was great restlessness and insomnia, so that his family and friends had to watch with him all night, and they informed me that they had not known him to sleep more than one hour at a time for more than a fortnight; his memory was accurately retentive of circumstances and dates, but he seemed to have no reasoning capabilities, and to have lost all filial and paternal impulses. His marriage relations had ever been of the most pleasant character; and this, probably, in connection with his lack of general intelligence, is what led him to excessive venereal indulgence, resulting in impotence, a shattered constitution and a disordered mind. He told me that he had not had a complete erection for more than six months, and consequently every attempt at copulation had proven unsuccessful.

Ever since this debility or laxity of his genital organs had existed, he had been troubled more or less with lecherous dreams during sleep, and consequently with nocturnal emissions, without the least sign or attempt at erection. This continuous drain on the nervous system, persisting after the impossibility of coition, still tended to render more permanent his mental and physical disabilities. His appetite had become impaired, his bowels

obstinately constipated, and blood impoverished, so that, for all intents and purposes, he had become a mere vitalized wreck of frail humanity—a confirmed hypochondriac. His parents had procured the services of an irregular practitioner in the neighborhood, who had been tinkering with him for several months, and more than likely without the least conception of the real cause of the difficulty. What the diagnosis of the doctor was, or what his treatment, I am unable to say, but certain it was that the patient was growing more and more demented from day to day. Believing that all this train of evils had come from excessive venereal indulgence, and the nocturnal emissions from irritation, or rather, a peculiar irritability of the urethral canal about the mouths of the seminal ducts and the bulbous portion, I at once set to work to remedy the evil, by local as well as general treatment.

This condition of things is not unfrequently brought about in young men, from the vicious habit of masturbation, but, in twenty-four years of experience as a practitioner of medicine, I never before witnessed such a case in the marital state. In fact, I believe it is usually the case, that young men addicted to the habit, are recommended to marry, in order to avoid the evils consequent upon the practice. The indications for treatment in this case were clear enough, provided my theory of the difficulty was correct. It was, to lessen the nervous irritability of the bulbous and prostatic portion of the urethral canal; to enrich the blood; increase the powers of digestion, and to give general tone to the flagging energies of the system. My first step was, therefore, to thoroughly evacuate the bowels with a saline cathartic (they had been in a constipated condition for months, and never moved without the aid of medicines); next, I cauterized, with nitrate of silver the prostatic and bulbous portion of the urethral canal, by the use of *Lallemand's porte caustique*, and administered mucilaginous and demulcent drinks to obviate any inflammation that might arise from the use of the caustic. I regulated the bowels by a tonico-laxative pill given every night at bed-time, with the assistance of a cold-water enema in the morning, which was, at least, an adjuvant in restoring the tone of the debilitated organs. I gave tone to the nervous system, by the use of a ferruginous preparation, called the liquid oxy-sulph. of iron, the formula for which I found in the *CHICAGO MEDICAL JOURNAL*:

R, Ferri Sulph,	-	-	-	-	-	-	-	-	3 ij;
Acid Nit.,	-	-	-	-	-	-	-	-	3 ij.

Rub well together, then add

Aqua,	-	-	-	-	-	-	-	-	3 iss.
-------	---	---	---	---	---	---	---	---	--------

In \mathfrak{z} j of this solution, I dissolved quinine 3 j, strychnia, grs. iij. Dose, six drops, in water, three times per day, before meals. The iron in this prescription served to enrich the blood, by the increase of the red corpuscles, the nitric acid and quinine to give tone to the digestive apparatus and increase assimilation, and the strychnia to give a fillip to the general nervous system by its specific action on the great centres, and, through them to increase the muscular tonicity of the bowels, which had become almost entirely paralyzed; and last, but not least, I administered bromide of potassium, grs. xx., in water, one hour after each meal, which tended to relieve the insomnia, produce sleep, and soothe the nervous irritability of the genital organs. I ordered beef tea alone, until such times as his appetite began to return and relish solid food, after which, he was allowed beef-steak, oysters, fruit, and roast potatoes. The foregoing treatment was steadily pursued for about three months, with the interruption of the bromide occasionally after meals, giving it, at such times, always at bedtime. At the end of two weeks, he began to show decided signs of improvement in every particular, and at the end of three months, to all appearances, he was perfectly restored to his family, with his usual mental equilibrium, and the proper vigor of all his other functions. He is now a successful grocer, doing business in one of our adjacent villages.

Another case, son of J. B., aged 19, farmer, had been complaining, and the family thought, acting curiously for six months. He finally lost his appetite, became dyspeptic, emaciated, taciturn, and had an idea that he was ill unto death, and must die; but did not know why, or what it was that was going to end his existence. The family had noticed that his mind was out of balance for some time, but there was no reason of which they knew that could have produced this condition, as he had neither been sick, nor received any injury.

As in the former case, the family had consulted an irregular practitioner regarding his condition, and he had been under his care for considerable time. Finding, however, that the young man's

mind was growing gradually worse, I was consulted in regard to the case during the month of March, 1869. The family could give me no clue whatever to the difficulty, and the boy had no idea that his infirmities were brought on by his vicious habits. I accused him of such practices, but he persistently denied it. I was satisfied, however, from his general appearance, of what was the cause of his mental aberration, and accordingly told his father, who, of course, was taken quite aback, and had never suspected his son of such vicious practices. I directed that the young man should never be permitted to be out of the company of some of the family, and that his father should sleep with him every night. I cauterized the urethra, as in the former case, and put him under the same treatment, with the exception of the strychnine. In about four months, the boy was completely recovered, and is now a fat, hearty, cheerful young man, doing his accustomed labor on the farm.

Another case, William S., aged 22, a farmer, was a young man of good intelligence, and knew "what was the matter," and the cause of it. He had lost all interest in his business, and felt disinclined to any exertion whatever. He had lost his usual animation — so much so as to create much anxiety in the minds of his parents and friends. He had had nocturnal emissions for several months, so as to greatly annoy him, and had not had an erection for more than a year. He felt a natural delicacy in declaring his shame to his home physicians, and therefore resorted to some of the advertising charlatans of the city of Chicago for advice. After having made one or two trips to that city, and having been fleeced out of one or two hundred dollars by that delectable class of mountebanks, he concluded, on "sober, second thought," to try what virtue there was in home institutions. He therefore came to me, about two years ago, and laid his case before me. I put him through a very similar course to that of the former two cases, and in a very few months he had recovered his wonted ruddy complexion; his vigor and animal spirits had returned, and he was lively, energetic and active as ever. After his discharge, I never heard any complaints from him till this summer — 1869 — when he came to me, and, with considerable anxiety, said that he was entirely well, with one exception, and had been ever since his treatment two years previously. The exception

was, that along with his spirits and wonted energy, he had never recovered the power of erection, remarking that he had never had a presentable penis for two years, and asked my advice as to the means of remedying the evil. I prescribed ten drops of diluted phosphoric acid, in water, three times per day, for one week, when it was to be increased one drop at each dose per day, till the maximum dose would be 25 drops, after which he was to see me again. At the end of this time, finding but little if any aphrodisiac powers in the acid, I prescribed acid phos. dil., hashish fluid ext., aa \mathfrak{z} iv; of this the dose was twenty drops, three times per day, and increased one drop per day at each dose, till he took 40 gtt. At the same time that he began this prescription, I gave him the $\frac{1}{10}$ of a grain of strychnine, three times per day, and ordered the use of strychnine ointment to the perineum. About the time that he should have been taking 40 drops of the last prescription, I saw a notice of his marriage to an estimable young lady, which to me was conclusive evidence of his complete recovery. A few days ago I met him on the street, and made inquiries as to his welfare. "ALL RIGHT," said he; "I have been married now two months, and have no difficulty in performing all the duties of the marital relation." Of course, I advised prudence.

ARTICLE V.—*Tænia Solium*. By D. C. DAVIES, M.D.,
Columbus, Wis.

IN the JOURNAL for December, 1869, we notice two cases of *Tænia Solium*, reported by Dr. Owen, of St. Luke's Hospital, in which that learned physician seems to manifest a decided preference for pumpkin seed, as an ejective agent in cases of tape worm. It is not our desire to differ with Dr. Owens, for the sake of being contrary, but from higher motives—that of elevating our profession in all its several departments, while in pursuit of truth, be that even in the simple treatment of tape worm. We have found the ætherial extract of male fern, in all cases where we have had occasion to use it, answering our highest expectations, as the following cases will illustrate:

CASE 1.—Mrs. R., æt. 35, a native of Wales, who, upon first appearance, would lead a physician, owing to her ænemic, cadaverous and nervous condition, to dream of some uterine affection. Few questions, however, soon dispelled such conclusion, as the following group of symptoms will show: Bowels irregular and sometimes accompanied with a sort of gnawing sensation—appetite capricious—sleep disturbed—unaccountably nervous and fretful—despondency, almost bordering on hypochondriasis—and occasionally voiding “pieces of some white stuff” with the fæces, which, after due examination, we found to be segments of *tænia solium*. Satisfied as to the correctness of our diagnosis we ordered the patient to abstain from all food until further orders; and prescribed the following draught, to be taken before retiring, and the same the following morning:

℞ Extracti filicis ætheris, - - - - 3j ss;

S.—To be taken in a cupful of fresh milk.

At 10, A. M., the following day we ordered the annexed draught:

℞ Ol. ricini, - - - - 3j;
Ol. Terebinthinæ, - - - - 3j;

M.

Calling again, some three hours later, we found she had free evacuations, containing several pieces of tape from four to six inches long, and a large number of segments. Not satisfied with the appearance of things, we gave the following powder:

℞ Pulv. Scammon.
Calomelanos, - - - - aa gr. xij;
Pulv. Gambogæ, - - - - gr. vj;

M.

In less than an hour from the taking of the powder the balance of the tape was expelled, measuring twenty-seven feet intact. This specimen we have preserved.

CASE 2.—Mr. O'R., æt. 42, a native of Ireland. Placed him under the same treatment, with this exception, that we gave him 3ij of the extract in each dose, and also double the powder, believing in the old axiom that purgatives would not kill an Irishman. The tape was ejected in half an hour after the powder was taken, but I failed to preserve this specimen intact, owing, I

suppose, as stated by the patient, to the "d — n crather coming through in sich a divil of a hurry." Neither of the pieces would measure over ten inches, but from the number we should think it would measure from thirty to forty feet.

It may be surmised that the castor oil and turpentine, or the powder alone, would have ejected the tape, but that could not have been so in the last case, as he had, previous to my seeing him, taken enormous doses of calomel, jalapa and gamboge, without any other effect than catharsis and the ejection of some segments of the tape.

In conclusion, we will venture one remark on Dr. Owens' treatment, to wit: That if he had prescribed the oil of the male fern in larger doses we think he would have met with better success. We believe in the most active treatment in the ejection of all such "varmints."

ARTICLE VI.—*A Case of Placenta Prævia.* Reported by
I. B. WASHBURN, M.D., Star City, Indiana.

THE following case occurred in the practice of Dr. D. Rea, of Royal Center. Dr. Rea says that, August 17th, 1869, Mr. H. called at his office and asked him to prescribe for his wife, as she was flooding.

The doctor gave him opii pulv. gr. ss., plumbi acetas gr. iij, to be given every three hours until the hæmorrhage should cease. He heard nothing more from his patient until the 24th, when he was called to visit her because of a recurrence of the uterine hæmorrhage. He made an examination, and found the os slightly patulous and rather soft and flabby, but there were no symptoms of labor.

He repeated the opium and lead, which seem to control the hæmorrhage again.

The next morning he was called in great haste and found his patient flooding fearfully. He immediately dispatched a messenger for assistance, but before any arrived, the doctor, knowing that something must be done immediately in order to save his patient, passed his hand through the placenta and ruptured the membranes. The hæmorrhage ceased, the vertex prevented and pressed upon the placenta, compressing it so that a further dis-

charge of blood seemed impossible while it remained in that condition. Upon my arrival the patient was anæmic, pulseless at the wrist, extremities very cold, and she was in a semi-conscious state. The ragged edge of the placenta could be felt around the head of the child, the os was well dilated, the occiput opposite the left acetabulum, but there were no contractions of the uterus. Nature seemed exhausted.

We gave her ammonia carb. and camphor freely, alternated with a decoction of ergot, in small doses. In a short time there were signs of reaction.

We then prepared to deliver by version, but upon introducing my hand I found the head engaged in the upper strait, and believing the fœtus dead because of the loss of blood, we increased the stimulants, both general and uterine, and soon saw our patient delivered of a large, still-born male child. There was no more hæmorrhage. We applied heat externally and gave her ammonia and alcoholic stimulants freely, internally, after which she reacted gradually and slept.

The next day she was attacked with puerperal mania, which lasted about three weeks, but she recovered finally.

Her recovery being slow, notwithstanding Dr. Rea gave her good attention, through the meddling of officious neighbors, they changed to one Osborn, who, if he ever graduated or even attended a course of lectures, did so in "Brush College" or one of the "Sums" of Cincinnati. He is a medical "bushwhacker." He labeled one of his bottles "femal pils," and says that morphia is made of "*minerals and combustibles*."

ARTICLE VII. — *A Case of Poisoning with Sulphate of Copper.* Reported by Dr. D. B. HILLIS, Keokuk, Iowa.

AT 11 o'clock, on the night of the fifth of August, 1869, I was called to see Miss W. R., a large and well developed servant girl, æt. 18, doing housework in the family of Mr. O. of this city.

I was informed by him that the girl was in good health until about dusk of that evening, when, "all at once," she complained of intense pain in the head, soon followed by convulsions, and cramps in the stomach and bowels. When I arrived, she was

having severe clonic spasms of the jaws, arms and legs; and, when able to speak, complained bitterly of the pains, especially of those of the stomach, declaring that she was "burning up." The pulse was full, hard, and 120 per minute. Anything like continued pressure on the epigastric region caused great suffering.

I readily concluded the case to be one of poisoning, by some agent of great virulence, which she, after some persuasion, admitted, but obstinately refused to say what it was, or where obtained. She coveted death; and positively refused to swallow anything, until I threatened to use the stomach pump, which I made her believe was an engine of great power. I gave her the whites of six eggs, all that could be had in the house, followed by copious draughts of sweet milk, and, in a short time, by an emetic of ipecac and tartarized antimony, which acted promptly, causing the ejection of a large amount of ingesta, intermixed with a dark-brown fluid.

To enforce this treatment, required at least one hour and a half from the time I first saw her. The spasms, of which she had not less than thirty in my presence, began to decrease, and subsided entirely within the next hour. I was of the opinion that she had taken arsenic, and, after giving the last emetic, had sent for the hydrated sesquioxide of iron; but before the messenger returned with it, the patient, having concluded that she could not die, as was her desire, and being exceedingly anxious for relief from the agonizing pains, admitted that, about two o'clock that afternoon, she had taken two spoonsfull of blue vitriol, in brandy; but whether large or small spoons, solid or fluid measure, she would not tell. The true enemy now being known, I changed front accordingly, and gave the prussiate of potassa, in fifteen grain doses, every hour, until the active symptoms of poisoning ceased. With the second portion of the antidote, a large dose of castor oil was given, for the purpose of removing from the intestines any copper they might contain.

Suffice it to say, that after the third portion of the potassa — about twelve hours after the poison had been taken — I left my patient enjoying a quiet sleep, and from that time on there were no more active indications of the presence of the agent which had given so much trouble, save the severe corrosion, or inflammation of the membranes, with which it had come in contact, and from

which she recovered, under the use of aconite and belladonna, in tincture, together with demulcent drinks, and hot woollen cloths to the surface. I will just add, in conclusion, that for me the case was possessed of three points of special interest. The first, the length of time, five hours intervening, from the taking the poison until the development of the first symptom; the second, the entire absence of the usual nausea and vomiting produced by the various preparations of copper; and the third was, the efficiency and reliability, of the prussiate of potassæ as an antidote in such cases.

ARTICLE VIII. — *Death from Strangulation of a portion of the Ileum.* Reported by WM. L. LINCOLN, M.D., Washaw, Minnesota :

A SINGULAR case came under my observation, which, if it serve no other good, may throw its little share of light on the question lately brought again to my notice — How far can the lower bowels be filled by injection?

On the morning of November 8, 1868, about 10 o'clock, I was called to visit A. S., who was reported to be suffering from colic of a severe and obstinate form. The history of the case was this: He had eaten a hearty breakfast at his *camp* in the woods, where he was trapping, about 11 o'clock A.M., after which, for a couple of hours, he disposed of his game, and then he paddled his canoe and set traps until nightfall, after which he had walked to the town, some six miles. Between nine and ten in the evening he went with a friend in an oyster saloon, and ate a dish of raw oysters, and soon after retired for the night. About three o'clock A.M. he awoke with severe pain in the umbilical region, and suffering some nausea. He drank warm water, with mustard, from which he obtained free emesis without any relief of pain. He also applied mustard paste to his bowels. Afterwards he took some remedies prescribed by a Homœopathist who was at hand, and continued to grow worse until his sufferings were past enduring. His countenance portrayed extreme agony, and his first words, on my entering the room, were: "O, doctor, can't you do something for me quick? If you can't, I shall die!" He

located his pain in the umbilical region. There was no tenderness on pressure over any part of the abdomen; no coat on his tongue, and his pulse was but slightly accelerated. The symptoms pointed to intussusception.

He got, by endermic injection, one-fourth grain morph. sulph., and directing warm water to be had in readiness, I left him. Returning in fifteen minutes, found him perfectly free from pain. I then proceeded to prepare a rectum tube by winding a wet rag around it to form a collar to prevent escape of the fluid, and proceeded to inject six quarts of water, not leaving half a teacupfull in the vessel, when he desired a passage, and evacuated nearly the same quantity as injected. About five hours after the endermic injection, the pain returned, not less violent than at first; but a repetition of the injection was followed by the same happy effect. In the succeeding twenty-four hours, I repeated the injection per rectum, twice, each time using about the same quantity as at first, with no evacuation except the water injected. It was necessary to repeat the endermic injection every five or six hours, for when the opiate effect was past, his shrieks would disturb the neighborhood. In the evening of Wednesday, the 11th, he had sterco-racious vomiting, and sank rapidly for some hours, but rallied on the morning of Thursday, and pain returned not less severe than formerly. The injections of morphia gave prompt and full relief, and were repeated every five or six hours, until Sunday, the 15th, in the afternoon, when he vomited a fluid having a fecal odor, which was followed, in a few hours, with death.

Monday, 16th, eighteen hours after death, I made a *post-mortem* examination, assisted by Dr. Milligan, who I invited to be present.

On making the abdominal section, there was no appearance of serous inflammation on intestines or abdominal walls; but the cause of the pain and death was at once revealed. A knuckle of the ileum, some five or six inches from the ileo-cæcal juncture, was tied in a complete knot; about seven inches of the ileum having passed through the knot, and being ligated thereby. The mucous membrane of that part of the intestine forming the knot, was thickened and inflamed, and highly vascular. The knuckle presented less departure from a normal condition. That no one may be in doubt as to the kind of knot formed in the ileum,

will instruct how to form the knot: Take a rope or string, and make fast the two ends to some object; now take the free end, which is a knuckle, and pass a single knot in it, as near the end as you can. You will at once perceive that, if to your rope you had attached a piece of cloth to represent the mesentery, you could tie the same knot. I make this remark, because some physicians to whom a relative of my patient narrated the case, declared that such a knot was an impossibility.

The case proves to my mind that nature can do what the surgeon can neither do nor undo, and that water can be injected into the rectum so as to fill the colon to the ileo-cæcal valve.

Correspondence.

GLYCERINE AND CARBOLIC ACID FOR BURNS.

To the Editors of THE CHICAGO MEDICAL JOURNAL:

At the Gaiety Theatre fire in this city, some three weeks since, Mr. Bangs, photographer, was badly burned about the face and hands. The latter were affected so that the skin peeled off like gloves. As soon afterwards as possible, the burns were dressed with linseed oil, and morphia was administered to relieve pain. I first saw the patient next morning. I dressed the hands and face with the following:

R Glycerine, - - - - - ʒvj;
Acidi Carbol., - - - - - ʒj; M.

This augmented the pain considerably for an hour or more. It was applied freely, with a camel's hair pencil, and the fingers afterwards wrapped up, separately, with strips of linen lint. The dressing was changed daily, by soaking the lint in warm water, washing the parts by squeezing warm soap-suds out of a sponge over them, and re-applying the glycerine and carbolic acid. The patient had to have morphia once or twice daily, to relieve the pain. Eighteen days after, while others burnt no worse, but had received different treatment, were still suffering, Mr. Bang's wounds had healed and new skin formed, leaving no scar on the face, although the epidermis had all peeled off. After

this, simple cerate, or pure glycerine, was substituted, and he is now able to resume his work, although his hands are still very tender.

In the October number of the *American Journal of the Medical Sciences*, is a statement of a severe burn of the legs, from the knees down, treated by C. C. Lange, M.D., of Pittsburg, by linseed oil, 8 parts, carbolic acid, 1 part. I would say to the profession that this is too strong, too large a proportion of the carbolic acid, and must have produced intense suffering, besides the danger incurred by its *absorption* from so large a surface. A drachm to four ounces of glycerine, is as strong as should be applied, or as is necessary. I consider the glycerine preferable to the oil — is mild, protects from the air, and mixes thoroughly with the acid, which it dissolves.

On a portion of one hand, at the patient's request, and on his face, I tried the application of furniture *varnish*, in which he had great faith, from seeing a paragraph in the papers recommending it. The parts did not do so well, apparently, and it was discontinued, and the glycerine resumed, when they satisfactorily healed.

T. WILLIAMS, M.D.

IMAGINARY CASES.

CHICAGO, December 27, 1869.

To the Editors of THE CHICAGO MEDICAL JOURNAL:

I HAVE lately observed that you have begun, with a strong hand, to put down an evil that has attained no inconsiderable proportions. I mean, simply, the palming off upon the readers of professional journals of cases that only exist in the imagination of the writer, and gravely stating as facts, things that never have occurred; thus misleading many young men who naturally seek information in the pages of medical periodicals, and disgusting those whose experience enables them to see through the flimsy veil of assumed knowledge, and understand what amount of meaning there is in the *sesquipedalia* words that freely flow from their pens. Truth does not require words of such "learned length and thundering sound," but is contented to appear in the sober garb of good English, making a far better appearance than falsity does in bad Latin.

I hope you will continue to render the notoriety thus sought after less and less desirable.

In thus indorsing your cause, I know that I only express the opinion of every member of the medical profession in good standing among his fellows. So go on with the good work.

L.

Hospital Reports.

ARTICLE I.—*Cook County Hospital. Under the care of*
CURTIS T. FENN, M.D.

LIGATION OF EXTERNAL ILIAC ARTERY — DEATH. *September 17.* — Dr. Powell tied the left external iliac for diffused traumatic femoral aneurism, in the case of J. L., a stalwart Indiana farmer, aged 28, admitted to a private ward, September 13, 1869.

The patient died on the 20th, with symptoms of peritonitis.

During the last year of the war, he received a gunshot wound in the lower part of the left Scarpa's triangle. The ball glanced upward, and was lost. The wound healed.

In August, 1869, after a hard day's work, cradling in the harvest-field, he perceived a small swelling in the region of the cicatrix. It came in a day, and without pain. The next day, he felt "a rushing" there. The tumor increased with great rapidity from this beginning, and on the day of the operation presented a terrible aspect. A diffuse, ovoid, firm elastic mass occupied the anterior and inner aspect of the upper third of the thigh. Its centre was over the lower portion of Scarpa's triangle.

The enlargement was limited above by the abdomen, extending a little above Poupart's ligament, and diminished downward, reaching two-thirds of the way to the knee. The circumference of the thigh at its largest portion was nineteen and one-fourth inches greater than the corresponding measurement of the opposite side. A pulsating movement of the surface was visible across the amphitheatre. The skin was hot and shining. A rosy tint over the centre was deepening to red. A thrill of great force was communicated, when the hand was laid on the tumor. A

loud rushing sound greeted the ear by auscultation ; compression of the femoral artery, above the pubis, caused it to cease. The limb was comfortable when at rest, the circulation good, the temperature about normal, and, aside from the sense of weight and uselessness which it gave, the patient suffered no inconvenience. There was little general loss of flesh or strength, yet mental anxiety and suffering were depicted.

At a council of surgeons, it was decided that ligature of the external iliac afforded the best chance of arresting the disease.

Ether was administered. The patient came under the influence of the anæsthetic with difficulty. His breathing was accompanied by such spasmodic abdominal exertion as to interfere with the operation and endanger the peritoneum as soon as it became exposed. The incision was according to Abernethy's method. The application of the ligature was tedious, owing to imperfect anæsthesia, and the consequent hernial protrusion of the peritoneum, in spite of all efforts to retain it. The wound was dressed with sutures, adhesive strips and cold compress. Difference in the temperature of the extremities was well marked. Artificial heat was applied to the affected side, and opium given to keep the patient quiet, with beef tea for nourishment.

He died the third day, with symptoms of peritonitis.

Post-mortem examination revealed the aneurism springing from the trunk of the profunda femoris. The ball supposed to be lodged in the region was not found, nor could its track be traced.

Dr. Powell regards this case one of great interest, and intends to publish it at the proper time.

Original Translations.

ARTICLE I.—*Clinical Lectures upon Mental and Nervous Diseases; Alcoholism, Alcohol and Absinthe, Absinthic Epilepsy.* By M. MAGNAN, Sainte Anne, Paris.

(CONTINUED FROM PAGE 696, VOL. XXVI.)

ALCOHOL, in man, as an animal, is incapable, alone, of provoking epilepsy; it causes tremor, but that is all. When, on the other hand, epileptic attacks supervene, you never fail to discover that a different agent from alcohol has provoked them, and this agent is usually absinthe.

Epilepsy is, then, I repeat it, an epiphenomenon, which can not be considered as the highest manifestation of acute alcoholism. Among the patients whom you will examine to-day there will be found a man aged forty-one years, a market porter, who, after repeated excesses with wine and brandy, devoted himself more especially to absinthe. He had had, up to this time, tremors and some hallucinations, when three days ago he was suddenly seized, at the market, with an epileptic attack. He fell senseless immediately; his countenance was distorted, at first very pale, it became violet, the lips were covered with froth, the arms and the legs exhibited convulsive struggles; at the end of a moment the patient aroused himself stupified thoroughly. Some hours afterward he became violent, declared himself pursued by assassins, saw animals around him. He entered yesterday the examining office, his delirium continues, with frightful hallucinations, but one point upon which I wish to direct your attention is the condition of mobility: you will perceive a tremor of the hands, quite considerable, doubtless, but nevertheless not at all exaggerated, less severe even than in a case of acute alcoholism of medium intensity; there has been then no successive progression of motor disturbances terminating in the epileptic attack; this has been superadded, momentarily, to the ordinary phenomena, but without exercising, either before or after, any appreciable influence upon mobility.

I might furnish you with the recital of a large number of analogous observations, collected by M. Bonchereau and by myself, but they would throw no new light upon the question which we are considering. However, I must recall to you an incident which I had the opportunity to observe at Bicêtre, and in which the man, to a certain extent, submitted himself as the subject of experiment, in order to serve as a demonstration of the effect of absinthe.

Cl. . . (Louis), aged thirty-two years, entered the Bicêtre the 31st of October, 1863. This man, in excellent health, remained sober up to the beginning of 1861, at which date he became a wine merchant. He contracted, at this time, the habit of drinking; he took at first wine and brandy, then a little absinthe.

Alcoholic phenomena soon appeared, he experienced also vertigo especially. During the course of 1863 Cl. . ., to gain strength, made use of the absinthe liquor more freely; the attacks of vertigo became more frequent, and at a few days' interval he sustained two attacks, with sudden loss of consciousness, full, contorted face, convulsions of the arms and legs, bloody froth upon the lips, and biting of the tongue. One of the attacks occurred in church during a funeral ceremony, the other occurred on a stairway; in both cases they occurred unexpectedly.

Delirium, with frightful hallucinations, soon agitated the patient, and necessitated his sequestration at the Bicêtre; he arrived on the 31st of October, 1863, presenting the symptoms of an attack of acute alcoholism. He recovered quite rapidly, and at the end of a month was allowed to leave. On returning to his home he lost no time in resuming his old habits; on the other hand, alcoholic symptoms did not attend him.

Later, in consequence of a fresh abuse of absinthe, he sustained an epileptic attack similar to the preceding.

The patient was brought back the 28th of April, 1864, to the Bicêtre, where he remained, for his recovery, up to the beginning of June.

Discharged for the second time, he abandoned for some time the use of absinthe, but recommenced at the end of a few days to drink wine and brandy. His sleep became disturbed, hallucinations of a painful character manifested themselves; his appetite was lost, streams of pituitary secretion were discharged every

morning, and his limbs became tremulous. This condition continued two months, but Cl. . . , finding himself weaker, had recourse again to his favorite liquor. The absinthe provoked, very soon, new epileptic attacks, C. . . reëntered the Bicêtre, for the third time, the 5th of December, 1864. At the moment of his entrance he still bore upon his tongue traces of bites, convincing evidence of his last attack. Such was this observation, not to call it experiment. The subject is a young and vigorous man, entirely free up to that time from any alcoholic symptom or any convulsive phenomenon. Commencing with wine and brandy he became alcoholized, then giving himself up to absinthe he became epileptic.

During his first residence at the asylum the symptoms disappeared. Upon leaving he recommenced to drink; alcoholic symptoms at first supervene; he takes absinthe, then comes a new epileptic seizure. Another residence at the hospital, with a cessation of the symptoms. For the third time an excess of wine and brandy induce alcoholism; excess of absinthe, epileptic attacks which are superadded. Again residence at the hospital and sobriety, with cessation of the symptoms.

Can effect and cause be more intimately associated? Can we not, by doubling the dose, induce the effect of both alcohol and absinthe.

Absinthic-epilepsy could not be more clearly demonstrated. How much do these epileptic attacks, always in relation to the determinate agent which produces them, differ in respect to their nature from those which accompany chronic alcoholism? In this last case what happens! A patient presents epileptic or epileptiform symptoms; he enters the hospital, and during the entire duration of his residence we may observe several recurrences of attacks similar to the first under the influence of the most diverse causes, sometimes even without appreciable cause, absolutely as in patients suffering with certain cerebral lesions.

Chronic alcoholism exists indeed under analogous conditions; his cerebro-spinal system has sustained profound and persistent alterations. The prime cause exists altogether in the state of the organism, conditions very opposite to those of poisoning by absinthe, in which the sole cause is the poison.

What is the progress of acute alcoholism?

It would be difficult to form a just idea of the gravity of acute alcoholism from the statistics of the majority of physicians, and more particularly from English and American statistics.

Such wide variations occur in these documents that all comparison is impossible. Hence we believe it more useful, and of more practical interest to confine our investigations to observations collected at Paris, which enable us to form a more exact appreciation of all the elements of the problem.

In 1852 M. Delasiauve,* vividly impressed with the severity of certain cases of *delirium tremens*, published upon this subject an excellent treatise, in which may be found an accurate table of subacute *delirium tremens*.

Although the observations comprise but a small number of facts selected amongst the most important, there will be found, nevertheless, the proof of a very considerable mortality.

We shall draw, in the thesis of Doctor Contesse†, numerous documents, and so much the more valuable that they can in all points be compared to those which we shall obtain here. Among 5,238 patients suffering from various forms of delirium, entered at Bicêtre, from the 1st of August, 1855, to the 1st of April, 1862, M. Contesse found 1,000 alcoholic subjects, amongst whom there were 30 cases of death in the 34 first days after their arrival at the asylum; but the author, comprehending readily that this duration of 34 days would become unreliable by reason of its length, has added a table indicating the *deaths*, day by day, starting from the date of entrance.

In this manner we can, by embracing only the first five days, recognize the figure which reasonably indicates acute alcoholism.

After the 5th day the subjects of acute alcoholism do not die, properly speaking, of intoxication, *per se*, but rather from some of its complications.

Of the 30 deaths we find 21 during the first 5 days; there remains then but nine of them to be apportioned among the 29 days remaining of the 34.

**D'une forme grave de delirium tremens*, Delasiauve, *Revue Medicale et etragère*, 30 Avril, 1852.

†*Etude sur l'alcoolisme et sur l'étiologie de la paralysie générale*, Contesse, 1862.

These results, to which I particularly direct your attention, indicate sufficiently, by themselves, the existence of danger, especially in the acute period, that is to say, at the moment when the entire economy is under the pressure of the toxic impregnation. But among the 1,000 patients the acute and the chronic are indistinctly embraced. It is indispensable, nevertheless, to separate them, for the 21 deaths during the 5 first days, evidently refer only to cases of acute alcoholism.

We have been able to determine this relation by assuming, as a basis, our own results, which I shall submit to you, and we think we can show that, of the 1,000 alcoholic cases, about 260 were the subjects of acute alcoholism, which would give a proportion of eight deaths in a hundred.

You know, gentlemen, why I compare, without the least restriction, the statistical results of the Bicêtre with those of the Examining Office; it is because we have to deal with analogous elements.

Our patients of the Examining Office are different, for the greater part, from the patients who formerly were brought to Bicêtre; hence we find ourselves in identical conditions. The Parisian drunkards of 1862 do not differ, as I well know, from the Parisian drunkards of 1867.

Since the organization of the insane department of the Seine, 1st of May, 1867, up to this time, end of April, 1869, M. Buchereau and I have counted, among 4,866 entries, 231 cases of acute alcoholism, and 662 of chronic or sub-acute alcoholism, in all 893, out of which number we have lost, during the first 5 days, 3 patients only; more exactly, and omitting the chronic cases, 3 deaths in 231 cases of acute alcoholism, which gives 1.30 per cent. at the Examining Office, in place of 8 per cent., which was obtained at Bicêtre, I might even say that we obtained at Bicêtre; for, you know, the patients arrive generally in the afternoon, and the first treatment is given by the internes (resident students). The patients, then, who died on the first day were treated by us. The results obtained by M. Bouchereau are almost analogous to those of M. Contesse and to mine. How then can we explain this difference between 8 per cent. at Bicêtre and 1.30 per cent. at the Examining Office, with the same patients, the same physicians? I may also add that our pharma-

ceutical treatment at the Examining Office scarcely differs from that which we prescribe at Bicêtre. You perceive, gentlemen, that there is an X, an unknown quantity, and of this unknown quantity we shall now speak.

When a case of acute alcoholism arrived at Bicêtre, what was done?

He was perhaps violent, dangerous to himself, dangerous to the attendants. The first indication to be fulfilled was to protect him against himself, and to prevent him from doing harm to others.

The straight waistcoat was the remedy. This apparatus carefully applied had the effect to exercise a certain restraint over the thoracic movements, especially towards the base, but there the danger was but slight.

The subject of acute alcoholism, in spite of the waistcoat, continues his violence, strikes all around him, wounds himself and necessitates other precautions.

The bed is all ready to receive him. He is placed so much the more readily, that these patients, manifesting always a certain febrile condition, it seems necessary to place them in bed.

The subject of acute alcoholism remains in bed solely under one condition, that he be secured; it thus becomes necessary to fix him there.

To be tied to the bed, is death to the patient. You will understand this.

The patient is extended upon the bed; the straight waistcoat is laced, the arms, crossed in front, are secured by the aid of sleeves on each side of the thorax, and are solidly applied to the chest. This is an excellent means to render the lower part of the thorax immovable, to prevent the play of all the false ribs, and of two or three of the last ribs.

At the upper part of the waistcoat are two rings corresponding to the sub-clavicular region; bands passing through these rings are fixed below and behind at the upper extremity of the bed, and in order that the patient may not slip, that his head may rest easy, the pillow is placed between the bands which pass under the head, and the head is applied to it in such a manner that the whole anterior and superior part of the waistcoat remains tightly strained across the corresponding part of the thorax, which it fixes immovably.

As soon as the chest is thus clamped above and below, the diaphragm is set in motion, and abdomen respiration supplies, up to a certain point, the imperfection of thoracic respiration.

But the patient having his legs free, feeling ill at ease, makes incessant efforts to detach himself from the bed. Naturally this must be prevented. The legs are extended, brought together, and the feet, encircled with shackles, are secured to the extremity of the bed. The result of this is tension of the muscles of the abdominal walls, which especially hinder the efforts of the diaphragm. This is not all. Large folded sheets, placed across upon the belly and limbs, are secured to each side of the bed.

Thus garroted, the patient at first cries vociferously. His countenance becomes purple, his eyes injected; the swollen jugular can scarcely empty themselves; the whole cephalic extremity becomes congested; the countenance becomes puffed and glistening, the neck swollen, sometimes bulging out like a cushion above the rigid ring of the waistcoat, which strangles him. In a state of inexpressible anguish, the miserable patient struggles, and makes superhuman efforts up to that point, where, exhausted, in a state of semi-asphyxia, and always under the active influence of the poison, he falls into a condition of complete resolution.

Death sometimes occurs very suddenly; at other times the face becomes livid, the body is covered with a viscous cold sweat. Involuntary evacuations occur; the pulse is small, tremulous, compressible, with subsaltus tendinum, slight thrilling movements in all the muscles, by degrees respiration is impeded, all the functions are arrested insensibly, the patient is quietly extinguished.

Such are the severe cases. When the patient resists, quite frequently he falls into a semi-comatose sleep; the state of resolution in which he lies induces a relaxation of the whole organism; respiration and circulation, although impeded, are gradually reëstablished. Profuse sweats cover the body, and after a variable number of hours, the patient awakens, crushed, sometimes tranquil, at other times preserving a certain degree of excitement, betraying itself by incoherent words, by feeble cries, and by efforts, which his exhaustion renders powerless.

Let us examine now how we may, at the Examining Bureau,

fulfill this first indication, viz., to protect the patient against himself and to prevent deeds of violence to those around him.

I speak to you so much the more freely because the original merit belongs entirely to the administration which, at its first organization, was sufficiently intelligent to place in our hands the means of action necessary to secure good results.

As the alcoholic patient is in a state of extreme agitation we place him in swaddling clothes, which we have substituted for the straight waistcoat. This swathe of cloth, in winter, and of linen in summer, adapts itself exactly to the surface of the body, without exercising pressure upon any point. The arms remain pendant, and are retained in this position by the aid of lateral pockets, into which the hands enter; these are retained by the sleeve itself, fastened in its turn to the portion of the swathe which serves for pantaloons. We employ for women this same form of swathe by adding to it a petticoat.

I will exhibit to you an acute alcoholic subject, excited, and you will see, thanks to the position of the arms, maintained along the sides of the swathe, to be the reverse of what happens with the waistcoat. The greater the agitation the more easily is the respiration accomplished. In some cases the swathe and the presence of a keeper are not sufficient to prevent accidents.

We then place the patient in a large, well ventilated cell, having its wall covered with a thick layer of hair, kept in position by strong sail-cloth, stretched very tight and well varnished upon its exterior surface. Upon the floor are placed two palliasses, placed one upon the other, covering the whole floor, the first extending in a single piece over the whole surface. The second, composed of several pieces, which may be changed as soon as they become soiled.

In the corner is placed a caoutchouc vase. On the floor is a mattress covered with clothes and coverlets, with a bolster and pillow.

The keeper remains before the door, and through a little loop-hole observes what passes.

This fulfills the first indication; the patient may execute the most disorderly movements, or give way to the most active violence; there is nothing to be feared.

All the functions are regularly performed; and the greater his

activity the more rapidly will the poison be eliminated by the perspiration and respiration.

This leads me to speak of the second indication, to facilitate the elimination of the poison.

At this point we avail ourselves of the knowledge acquired in our physiological studies.

We know that alcohol is not transformed, that it escapes in the state of alcohol, and that the danger will pass away so much the more quickly as the elimination is more rapid and more complete.

Thirst is generally acute; it should be satisfied, by inundating, as it were, the alcoholic patient with aqueous drinks, diluent or slightly aperient. Citric acid, lemonade, tisane of couch grass (*chiendent*), slightly nitrous, barley water, with a little cream of tartar, are usually used. Under these circumstances, if no complication supervenes, the poison is speedily expelled by the lungs, the kidneys and the skin.

But at this period of effervescence, of nervous hyperæsthesia, succeeds a last phase, of totally different physiognomy, viz., collapse, nervous exhaustion; a state of extreme prostration, from which the patient is extricated with the greatest difficulty.

This condition, which demands consideration, furnishes matter for a third indication,

To build up the strength.

We have recourse to tonics, more particularly to cinchona, and by preference to the extract, which we use largely.

We administer broths, soups, meat essence, and even meat itself, as soon as it can be borne.

And lastly, it is sometimes good to give a little wine.

To epitomize. 1st. Protect the patient; 2nd. Eliminate the poison; 3rd. Support the strength. Such are the symptoms which present themselves ordinarily in acute alcoholism.

Among the simple means of fulfilling these indications, of which I have just spoken to you, you have doubtless remarked that there has been no suggestion of opium, nor of digitalis, nor of chloroform, nor of alcoholic diet, nor of blood-letting, etc.

If the unfortunate results obtained with these different medications did not suffice to induce their rejection, what we know at this date, of acute alcoholism, should compel us to proscribe them, absolutely, except with very rare exceptions, which should, of themselves, originate in the presence of complications altogether special.

Editor's Book Table.

A Practical Treatise on the Diseases of Children. By ALFRED VOGEL, M.D., Professor of Clinical Medicine in the University of Dorpat, Russia. Translated and Edited by H. RAPHAEL, M.D., late House-Surgeon to Bellevue Hospital, Attending Physician to the Eastern Dispensary for the Diseases of Children, etc., etc. From the fourth German edition. Illustrated by Lithographic Plates. New York: D. Appleton & Company, 90, 92, and 94 Grand Street. 1870. Pp. 603. \$4.50.

THIS book passed to its fourth German edition in eight years, and has been translated into all the prominent languages of Europe. The present translation is by permission, and the author kindly forwarded advance sheets of all new matter, or changes, in the last German edition.

In point of literary merit, the translation is a success; the inverted and otherwise idiomatic peculiarities of the original disappearing in a sufficiently transparent English. The name of the eminent publishing house upon the title page, is guarantee, in full, of the fact of its presentation to the American reader in a beautiful and suitable dress.

As a systematic treatise, it is unusually full and complete, as a glance at the table of contents and the very minute and extensive index, will demonstrate.

The first chapter is devoted to Anatomo-Pathological observations upon the infantile organism, discussed under the several heads: A, Respiration and Circulation; B, Secretions; C, Growth. Chapter II., gives General Rules for the Examination of Children — a most excellent *résumé*. Chapter III. treats of the Nursing and Care of Children, and is full of valuable hints and instructions. The remaining chapters are devoted to the consideration of special diseases.

We take unmingled pleasure in noticing that therapeutics, based on bald empiricism, find little place in our author's teachings.

A full account of the pathology, a clear, concise and accurate detail of symptoms, with all the known methods of differential diagnosis, prepare the way for suggestions in treatment of, generally, a satisfactory rational character. Polypharmacy finds little honor herein.

A book worthy our science and the age.

On the Wasting Diseases of Infants and Children. By EUSTACE SMITH, M.D., London, M.R.C.P., Physician Extraordinary to His Majesty the King of the Belgians; Physician to the N. W. London Free Dispensary for Sick Children, and to the Metropolitan Dispensary. Philadelphia: Henry C. Lea. 1870. Pp. 195.

WASTING, which is a sign of defective nutrition, is not always the first sign of a disease which may be detected, and may, even in some of the worst cases of defective nutrition, be entirely concealed from the superficial observer, by fatty degeneration or deposit, œdema, etc. Acute disease may be the starting point, or a great variety of hereditary, constitutional or acquired causes may be at the foundation, which any incidental cause may waken into full activity. This fact is always one of the chief sources of anxiety, pending the presence of intercurrent disorders, not, of themselves, seemingly threatening. *Obsta principiis*—sequela of diseases, not fatal, and from which recovery seems *almost* complete, should be thoroughly studied, lest, peradventure, dormant seeds of diathetic disorders, may have been put in process of germination, or the great organs of nutrition have become involved in lasting error of action. Let not the immediate danger obscure the remote, perhaps the greater. Very many diseases, by their occurrence and progress, give us the clue to the ultimate tendency to death. The “weak point” is disclosed; and the judicious physician, knowing this, may oftentimes so govern his patients’ subsequent management of himself that he may, nevertheless, reach even unusual longevity.

As we have elsewhere, and often, insisted, a proper understanding of the action of the human body, and the causes of disease, will hereafter enable us to make use of the latter for the cure of other diseases, and even for securing increased longevity, both to the individual and the race.

After an introductory section (which we wish was more extended) with hints on mode of examination, general therapeutics, etc., the author treats *seriatim* of Simple Atrophy from Insufficient Nourishment, Chronic Diarrhœa, Chronic Vomiting, Rickets, Congenital Syphilis, Worms, Chronic Tuberculosis, Chronic Pulmonary Phthisis, Tuberculization of Glands, and an Addendum, discussing Derangements of the Bowels attendant on Second Dentition.

The diagnosis of each of these disorders is perspicuously made out, and but very little space devoted to pathological considerations. It is evidently a book that aims especially at *practicality*, and hence more attention is paid to formularized treatment than has been usual in these later years.

Numberless formulæ stand out in relief upon its pages. These are characterized by correctness of combination and pleasantness of form, rather than by any novelty. So far as we can judge, they are all of that character that may find occasional use. To younger practitioners, who seek a practical guide whilst learning how to treat the diseases of children, under the lead of wide and more comprehensive views, it will afford an assistance for which they may be temporarily grateful. We trust it may not fasten them to routine treatment, and superficial ideas.

Manual of Hypodermic Medication. By ROBERTS BARTHOLOW, A.M., M.D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio, etc., etc. Philadelphia: J. B. Lippincott & Co. 1869. Pp. 150.

This is a very convenient little book, embodying the practical experience of its author in hypodermic medication, and referring, in suitable terms, to the contributions of French, German and English authorities, upon the same topic.

The first part treats of the History, Technology and General Therapeutics of the method. The second part gives illustrations of the use of Morphia, Atropia, Strychnia, Conia, Woorara, Nicotia, Hydrocyanic Acid, Physostigma, Caffein, Ergotin, Quinia, Mercury, Arsenic, and Irritant injections.

Plates of the instruments preferred are given, and also those diagrams illustrating the effect upon the pulse, temperature and

respiration of subcutaneous injection of Morphia and Atropia, separately and combined.

For those who wish to make constant or occasional use of this method of securing the usual effects of active and yet concentrated medicines, we cordially recommend this little treatise as the best on the subject.

Pamphlets.

The Pathology of Bright's Disease. By WM. B. LEWIS, M.D., Lecturer on Renal Pathology in the Medical Department of the University of the City of New York; Microscopist of Charity Hospital, etc.; with Illustrations. Published by Turner & Mignard, 109 Nassau Street, New York. Pp. 29. Price, 50 cents.

A VALUABLE contribution, in brief, to the literature of the subject. The writer adopts Virchow's classification of kidney diseases: "An organic lesion affecting primarily the tubes and their lining; another producing at first increase and afterwards contraction of the fibrous stroma; and a third attacking the vascular supply of the parts," but observes: "If we accept a three-fold division as the first law of renal pathology, the second is that one of these types of disease may excite another, so that it is not unusual to find two, or, apparently, even all of them coexisting in the same organ." Albuminuria is a broader term than Bright's disease. Renal congestion we are justified in classing (Dr. Wm. Roberts) as a separate morbid state included in the term albuminuria, but not in Bright's disease. The author disagrees with Dr. G. Stewart in his idea of "acute nephritis terminating fatally in the first stage," and gives several detailed cases, with illustrations from microscopic observations. These show the condition to be renal congestion, active or passive, and present no indications of inflammatory action, notwithstanding the presence of albumen, casts and even blood in the urine.

The discrepancy of view, after all, is merely one of definition — Dr. Stewart would include the *active* renal congestion as evidence of existent inflammation in its primary stage.

"The three types of morbid processes properly included in the term Bright's disease are as follows:

"I. Tubal nephritis, also called *acute desquamative nephritis, acute diffuse nephritis, the inflammatory form of Bright's disease, croupous nephritis, and acute Bright's disease.*

"II. Granular degeneration, also called *chronic desquamative nephritis, parenchymatous nephritis, the cirrhotic or contracting form of Bright's disease, the gouty, or the fibroid kidney.*

"III. The waxy, *depurative, amyloid, or lardaceous disease.*

"Authors who make the duration of the malady a basis for classification, include the second and third divisions under the term *chronic Bright's disease.*"

The main features of the three morbid processes classed under the head of Bright's disease are then examined in detail, and the results illustrated by diagrams from microscopic study, and the author concludes:

"We have now examined the main features of the three morbid processes classed under the title Bright's disease. It has been shown that tubal disease is an accompaniment of two forms, and the essence of the other; that in tubal nephritis, disease is confined to the tubes and their epithelium; in granular disease, primarily to the connective tissue, but that subsequently, tubal disease may appear; in waxy degeneration, primarily to the arterioles and capillary tufts, but that as a consequence tubal disturbance often manifests itself. Contraction and a surface covered, as it were, with granulations, are found to be characteristic of advanced granular disease, but appear also in waxy degeneration from similar causes. Fatty degeneration is reduced from the rank of a disease to that of a symptom; consequent upon sustained epithelial disturbance, it appears whenever this condition obtains.

"The 'large white kidney' is a result of tubal nephritis, which in its chronic stage has resolved itself into fatty degeneration. The 'small white kidney' may be a result of either granular or waxy change. Such are the combinations, and the successions generally observed. Waxy infiltration is said, however, to follow occasionally in the train of tubal nephritis.

"In conclusion we may allude to the sometimes difficult matter of determining the original lesion as we examine combined forms of kidney disease. We have seen that Stewart and others constitute a third or contracting stage of tubal nephritis. But such a state of the organs must be brought about by two processes, contraction of the fibrous element, and disease of the tubes. Which of these has caused the other cannot be determined by the microscope alone. It is a question for clinical observation to decide.

"Of itself tubal nephritis is not known to cause, or, in any great proportion of instances, to be followed by hypertrophy of the left ventricle

of the heart, or valvular disease of the same organ, or cirrhosis of the liver. On the other hand these are the commonest attendants of granular disease. Hence, if we meet the combined form above mentioned with such concomitants, it is quite certain that the granular disease is the older lesion. So in waxy degeneration, if a contracted kidney is associated with a considerable infiltration of other organs, known to be liable to such change, it is not difficult to decide that any tubal disturbance discovered must be a result and not a cause of the renal lesion. Again, if it should be questioned whether the contraction of such a kidney were not due to granular degeneration, clinical observation would show that a large liver, a heart almost always free from chronic disease, and the presence of some exhaustive drain upon the blood, conditions not found with the granular kidney, point to a process of disease essentially different.

"In Bright's disease, then, there are included three types of morbid change, but in accordance with certain well-defined laws, these may be variously combined in the same organ."

Nocturnal Enuresis and Incontinence of Urine. By FREDERICK G. SNELLING, M.D. Turner & Mignard, 109 Nassau Street, New York. Pp. 18.

DR. SNELLING calls attention to the "random and slipshod manner" in which these difficulties are usually treated. After indicating a large number of direct and indirect causes, he says:

"It is apparent that diverse as these may be, they can only act by giving rise to one of three prime conditions, viz.:

"Atony or paralysis of the bladder itself, permitting over-distension, and resulting in stillitidism.

"Abnormal irritability and contractility of the bladder sufficient to overcome the resistance of the sphincter.

"Or, atony or paralysis of the sphincter vesicae itself.

"These conditions may vary in degree; or in a given case two of the conditions may coexist, as, for example, paralysis of both bladder and sphincter."

After pointing out the sources of nervous supply of the bladder and sphincter, he calls attention to the fact that although sometimes the fear of corporeal punishment or ridicule may often suffice to supply the necessary nervous stimulus to control the difficulty, yet there may be an error of application, for there may be insufficiency of power or actual paralysis "*either of the cerebro-spinal fibres, of the sympathetic systems, or of the muscular coats of the bladder itself.*"

Another difficulty is "that the nervous system may become *habituated to inattention*, as also, on the other hand, to the

unconscious exercise of voluntary power." These also may be connected with *deficient co-ordinating* power. The voluntary effort to contract the sphincter may result in contraction of the muscular coat of the bladder.

The therapeutical suggestions are quite full. We quote or abstract.

In the very young, after removing all *possible* causes of reflex irritation, he has had much success with :

B	Tr. Lyttæ,	-	-	-	-	-	-	3 v;
	Tr. Nucis Vomicae,	-	-	-	-	-	-	3 iij;
	Vini Ferri Dulcis,	-	-	-	-	-	-	3 v;

M. — A half teaspoonful twice or thrice a day to a child five or six years old.

If there be much nervous irritability there may be combined with this a drachm or a drachm and a half of Magendie's solution of morphine; also

B	Tr. Nucis Vomicae,	-	-	-	-	-	-	aa 3 iij;
	Tr. Ferri Acet.,	-	-	-	-	-	-	

M. — 10 or 15 drops to be given after breakfast, and twice during the day.

In these cases the urine does not retain its normal character. It is always more copious than natural, of lower specific gravity, lighter in color, and rarely contains the proper amount of characteristic organic ingredients. In a case presenting these characteristics, arising from inherent feebleness of constitution and highly sensitive nervous system, I have obtained complete relief from the above prescriptions, combined with a tonic —

B	Syrup of the Hypophosphites,	-	-	-	-	-	-	3 v;
	Elixir of Yellow Peruv. Bark,	-	-	-	-	-	-	3 v;

M. — A teaspoonful twice a day before meals.

These cases generally bear iron well.

The difficulty is more common in girls than boys. They should be urged to exercise the will during the day so as to accustom the bladder to the presence of the urine. Opium, hyoscyamus and conium are the best sedatives in this form of irritable bladder. The combination of cantharides with opium will greatly strengthen the resisting power of the sphincter.

In over-distension and stillicidium from more or less paralysis :

The catheter should be in constant use, and tannin, catechu, ergot, uva ursi, buchu, cubebs, nitrate of potash and opium should be used, combined with the cautious use of the cold douche or shower-bath to the sacrum; or a blister over the same part. The tannic acid acts as a strong

astringent (I am not yet prepared to advocate its injection), the uva ursi as an astringent and exciter of the detrusores urinæ — the ergot exercises a most powerful influence over the unstriped muscular fibre; the buchu is a most efficient stimulant to the bladder, as well as a diuretic; the cubebs is a stimulating tonic with an especial tendency to the urinary mucous membranes; the nitrate of potash acts upon the internal coats of the bladder by rendering the urine more acid and stimulating; and opium has the most marked and singular effect of contracting the bladder and diminishing its calibre, of decreasing the secretion of urine, and of producing a tonic contraction of the sphincter vesicæ. These remedies may be used singly and in various combinations. An excellent one is —

℞ Elixir Aromat. Secalis,	-	-	-	-	-	-	3 ss;
Tr. Uva Ursi,	-	-	-	-	-	-	3 ss;
Tr. Buchu,	-	-	-	-	-	-	3 vi;
Ess. Pyrolæ,	-	-	-	-	-	-	3 ij;
Syrup Zingiberis,	-	-	-	-	-	-	3 j;

M. — Half or one teaspoonful three times a day for an adult.

Were the action of the haschisch or cannabis indica more certain, I would recommend it in combination — but it may be used alone in doses of from fifteen to forty minims, carefully watched. Another efficacious combination is —

℞ Nitrate of Potash,	-	-	-	-	-	-	gr. x;
Tannin,	-	-	-	-	-	-	gr. ij;

M. — Pro dose. To be taken three times a day in simple syrup or solution.

Strychnine has been injected into the bladder with success in the proportion of 1 part to 1,000 parts of water.

Cases of renal calculus, or other diseases of the kidney, diseases of the uterus, vagina, rectum, prostate, etc., etc., require each their special treatment, of course, but about all of them will be more or less relieved by the exhibition of bland mucilaginous drinks, rest, the application of strong tinct. aconite over the pubes, and the careful avoidance of all the causes of increased acidity or other irritating properties of the urine.

Small doses of belladonna have a well-known power of allaying spasm and irritability.

In those cases, lastly, dependent on atony or paralysis of the sphincter vesicæ, the sheet anchor of treatment will be strychnine or nux vomica, variously combined with the tincture of cantharides, opium, morphine, or cannabis indica, iron and the vegetable tonics, as, for instance —

℞ Ext. Nucis Vomica,	-	-	-	-	-	-	gr. viij;
Oxydi Ferri Nigri,	-	-	-	-	-	-	3 j;
Pulv. Quassia,	-	-	-	-	-	-	3 j;
Syr. Absinthe,	-	-	-	-	-	-	q.s;

M. — Ft. massa et in pil xlvijj divide. One pill to be taken three times a day.

With this may be given also any one of the many so-called ferrated elixirs of bark. They are all of them mild and excellent tonics for children. If there be much nervous disturbance with it —

℞	Tr. Cantharidis,	-	-	-	-	-	-	3 ss;
	Tr. Hyosciami,	-	-	-	-	-	-	3 ij;

M. — A half teaspoonful twice or thrice a day.

A blister to the sacrum will also sometimes have the most marked effect.

If there be also a condition of morbid irritability of the neck —

℞	Ext. Belladonna,	-	-	-	-	-	-	gr. iij;
	Ext. Nucis Vomicae,	-	-	-	-	-	-	gr. ivss;
	Phos. Acid. Dil.,	-	-	-	-	-	-	3 j;

M. — Fifteen drops three times a day.

If from a difficult labor, causing paralysis of the bladder or sphincter vesicae, from pressure —

℞	Ergot of Rye (Elixir Aromat.)	-	-	-	-	-	-	3 iij;
	Tr. Nucis Vom.,	-	-	-	-	-	-	3 j;
	Phos. Acid Dil.	-	-	-	-	-	-	3 j;

M. — Fifteen drops three times a day.

Or —

℞	Strychnia,	-	-	-	-	-	-	gr. j;
	Tr. Ferri sesqui-chlor.,	-	-	-	-	-	-	3 ij;
	Balsam Copaib.,	-	-	-	-	-	-	3 j;
	Infus. quassia,	-	-	-	-	-	-	3 xij;

M. — Dose, an ounce three times a day.

Tannin may also be given in one-grain doses, in substance night and morning.

An excellent combination is —

℞	Fl. Ext. Cubeba,	-	-	-	-	-	-	3 ij;
	Fl. Ext. Buchu,	-	-	-	-	-	-	3 iv;
	Ess. Gaultheria,	-	-	-	-	-	-	q. s.;

M. — Fifteen to thirty drops every two or four hours.

The balsams have also been recommended by Mr. Chabrely, as, for instance —

℞	Styrax Balsam,	-	-	-	-	-	-	3 iss;
	Peruv. Balsam,	-	-	-	-	-	-	3 iss;
	Honey,	-	-	-	-	-	-	3 ij;
	Pulv. Gum Acac,	-	-	-	-	-	-	q. s.

M. — To make an electuary — a teaspoonful night and morning.

Or —

℞	Styrax Balsam,	-	-	-	-	-	-	3 iss;
	Balsam Tolu,	-	-	-	-	-	-	3 ij;

M. — Ft. massa et div. in pil aa gr. v. to be silvered. Four to eight pills a day.

The Physiological Action and Therapeutic Uses of the Acidum Phosphoricum Dilutum. By JUDSON B. ANDREWS, M.D., Assistant Physician in the New York State Lunatic Asylum. Read before the Oneida County Medical Society. 1869. Pp. 17.

AFTER discussing the supposed material relations of this acid to the nervous tissue ("chemical food"), Dr. Andrews gives the usual sphygmographic drawings, illustrative of its effects upon the pulse. He then details several cases wherein its efficiency as a nerve tonic and stimulant seemed quite apparent.

We append, as giving the gist of the matter, the concluding pages of the monograph :

"Cases are sometimes under treatment at the Asylum, and more frequently in private practice, especially from among literary, professional or business men, which are characterized by loss of mental power from excessive brain activity.

"The patient is languid, unable to perform mental labor with the usual facility, is nervous, at times fearful, timid and agitated; the memory is weakened, and permanent impairment seriously threatened. Examination reveals no organic lesion, but the symptoms are such as justly occasion alarm. Such cases have been improperly called by some recent writers cases of cerebral paresis, a term too strong in its import, but expressive of the great danger which impends. For the recovery of these cases, relaxation from business and labor, and the use of the phosphoric acid, combined with some suitable tonic, generally suffices.

"In cases where mental effort has been protracted till a sense of weariness renders its continuance difficult, a dose of the acid, from its stimulant effect, relieves fatigue and seems to invigorate the mental powers, and prepare the mind for renewed exertion.* In the night sweats attending consumption, and other exhausting diseases, this acid is employed with benefit, and has some advantages over the aromatic sulphuric acid, so generally used. It is much more agreeable to the taste, more likely to be tolerated, and does not constipate the bowels. The anti-scorbutic power of this acid is well settled. A marked case of purpura occurred in the Asylum recently. The patient had been an inmate for several months, and though eating the ordinary diet of the house, in which vegetables are

* A professor in one of our Medical Schools, in a letter to Dr. Gray, recently remarked: "Wonderful thing that phosphoric acid, and well named by me psychological lemonade. My lunch at noon (we dine at six) consists of rich cheese, bread, and a glass of phosphoric acid lemonade, and on that I have worked eight and nine hours a day, with my pen, for the past seven weeks in this hot weather, without headache or any depression. I never take over fifteen drops, and only once a day, and when fatigued. It is wonderful how quick it climbs into the anterior lobes, scatters capillary congestion, and satisfies the hungry tissue with its own pabulum."

bountifully supplied, became scorbutic. The gums were red and spongy; there was lassitude, soreness of the muscles, and an eruption presenting the forms of petechiæ and vibices upon the anterior of the chest and the inner surface of the thighs.

"The patient was given the acid in half drachm doses, and in two weeks entirely recovered. In cases of anæmia and chlorosis, in both of which there is a depressed condition of the nervous system, phosphoric acid in combination with ferruginous tonics, has been found especially efficacious.

"At the Asylum, as an adjuvant for the solution of quinia in water, phosphoric acid is now substituted for the sulphuric acid, with the advantage of increasing the tonic properties of the solution. In giving quinia, we have in cases marked by great nervous prostration, and accompanied with profuse perspiration, found this acid in half drachm doses a valuable addition, and one that seems to increase the power of the alkaloid. To the ordinary elixirs, tinctures and decoctions of bark, the acid forms an important aid, and by its acidity it overcomes to a great degree the unpleasant taste of the vegetable bitters.

"Observation here confirms the views of Nelligan and others, that this substance exerts no direct influence on the generative function. It has thus been employed on theoretic grounds; but any favorable influence it has exerted has probably been owing to its general tonic effect. We have used it extensively, and in cases where this function was abnormally excited; and in no instance has its administration been suspended from this cause, or has any inconvenience resulted from its use.

"Phosphorus in substance is now recommended in many of the Journals, in some forms of paralysis, in locomotor ataxy, and in other of the neuroses. It is an element difficult to dispense and dangerous to administer. In the stomach it is converted largely into phosphoric acid. It is from this change taking place in the stomach, that the danger is to be apprehended. Is it not better to employ the acid, which in proper doses is harmless, than to incur the risk of consequences in giving phosphorus in substance?

"In the administration of this remedy, one general principle should be kept in mind, viz.: not to exhibit it in cases of congestion of the brain, or in those in which there is an inflammatory action, either in the nerve substance or the meninges, as its stimulant effect might prove an aggravation to existing disease. In no case in which it has been given, has it disturbed digestion or proved an irritant to the stomach, even when its administration has been prolonged.

"When the remedy was first employed at the Asylum, the dose was ten drops three times a day; this has been gradually increased till now the standard dose is a half drachm. This is given in water alone, or with simple syrup, with which it makes a pleasant and agreeable lemonade. The large doses spoken of were thus taken. In the various combinations with other remedies, the dose varies from 10 to 20 drops. A favorite tonic

remedy, which makes an eligible preparation, and one very palatable, is as follows :

℞ Acidi Phosphorici Dil.,	-	-	-	-	one oz.
Elix. Calisay.,	-	-	-	-	four oz.
Elix. Valer Ammon.,	-	-	-	-	two oz.
Glycerinæ,	-	-	-	-	three oz.
Sherry Wine,	-	-	-	-	six oz.

Dose, from one-half to one oz.

It is from an experience in the use of this remedy in more than two hundred cases, extending over a period of several years, that confidence has been inspired in its general adaptation to the treatment of diseases marked by debility of the nervous system.

Memoir of Robley Dunglison, M.D., LL.D. Read before the College of Physicians at a special meeting held October 20, 1869. By S. D. GROSS, M.D., LL.D. Philadelphia. 1869.

Biographical Sketch of the late A. B. Shipman, M.D., of Syracuse, N. Y. Read before the Onondaga Medical Society. By H. O. JEWETT, M.D., Cortland, N. Y. Albany. 1869.

EARNEST, eloquent and worthy tributes to medical men whose names the profession "will not willingly let die."

Aiken; or, Climate Cure. By AMORY COFFIN, M.D., and W. H. GEDDINGS, M.D. Charleston, S. C. Pp. 58.

THIS pamphlet is sent forth with the avowed purpose of convincing the reader that the climate of Aiken is peculiarly advantageous, in a sanitary point of view, as a resort for Northern invalids during the winter months. Its reputation in this respect was steadily increasing up to the commencement of the war, when, of course, "circumstances prevented."

The authors do not confine themselves to bare assertions or cataloguing instances of cure or relief, but bring forward carefully prepared meteorological tables, which include a period of eight years. Without going into detail here, we quote the statement :

"The atmosphere is so dry that surgical and other instruments, guns, etc., which require so much care in other places to prevent their rusting, may be exposed here for months without sustaining damage."

Wells have to be dug from 90 to 150 feet. The soil is porous, and the heaviest rain dries off in a few hours. "Fogs are extremely rare, and the Epiphyte *Tillandsia*, or tree moss, that unfailing indicator of moisture and malaria, which so gracefully festoons the live oaks of the low country, is entirely absent."

The mean annual temperature is $61^{\circ} 69$. The mean temperature of the colder six months of the year is $51^{\circ} 53$.

This is about as favorable an exhibit as can be given by the most vaunted resorts in Europe—Nice, Palermo, Pau, Venice, Pisa, etc.

The winds are mainly from the southwest, and very moderate. Southeast winds are rare. From the combination of dryness, mild temperature and freedom from injurious winds, the patient, it is claimed, can pass the greater portion of his time in the open air, and *scarcely know what confinement indoors means*. In the 55 days prior to writing there were only three when he could not have been out of doors enjoying the bright, warm sunshine and balmy air.

The *elevation* is only 600 feet above the sea level—the advantage of this in cases where there is a tendency to hæmorrhage is obvious. Practically, it is asserted, the climate proves itself tonic and bracing, rapidly promoting convalescence from tedious diseases, and peculiarly beneficial in phthisical cases. Its tonic influences can not be experienced in the mild but debilitating climate of Florida or Cuba.

Aiken is a town of about 1,300 inhabitants, 120 miles north-westerly from Charleston, accessible by rail. It is but 17 miles from Augusta, with which the same railroad connects it.

We have devoted some space to this pamphlet, because we of this section need some accessible point where we can send patients into a climate possessing exactly the peculiarities claimed for Aiken, South Carolina.

Comparison of the Mortality from Disease in Armies with that of Men of Military Ages in Civil Life, showing the Groups of Diseases chiefly concerned in Causing the Excess of Mortality in Armies. By A. NEWMAN, M.D., Lawrence, Kansas. Leavenworth. 1869. Pp. 39.

A large amount of valuable and instructive matter has herein been industriously collected by the author, but it has come to hand too late for analysis at present. We regret that competent medical men should seek the limited and temporary circulation afforded by the monograph, rather than the wide diffusion and permanent preservation afforded by the leading medical journals.

Editorial.

A Word About Hospitals.

WE see by the daily press that Cook County Hospital is crowded with patients, and for a long time we have known that the deficient space allotted to the sick of the city and county has been guarded by "red tape," to a degree that has rendered admission to its privileges, practically, a matter of extreme difficulty.

A man, wounded and friendless, picked up in the street by the police, stands a better chance of dying in the station house or the Armory than of finding lodging and care in the county castle of Hygeia.

No blame is herein intended for the efficient medical and surgical staff which attend at the county building.

The city and county are deeply in debt. The erection of the new and expensive wings of the Court House, the new Bridewell, Normal School building, etc., etc., tax, already, the abilities of the people, and the financial skill of the powers that be, to an extent that causes them to shrink from the attempt to provide new and capacious hospitals. Yet, this latter is an imperative necessity.

There is scarcely a city on the continent, or throughout Christendom, where there is so little provision for the sick poor. Private effort will vainly attempt to supply the want.

Chicago *must* have increased hospital accommodations. This is a fact too patent, too palpable, to need argument; and being assumed, we beg leave to submit to the profession and the community, that the want can easily and satisfactorily be filled.

For hospitals, the main demand is space — plenty of land and no more brick or stone castles. There is not, in this age of the world, a more unpardonable anachronism than the vast architectural monstrosities which every where, almost, in the cities, are piled up and labeled hospitals.

Let us have no more of them. Spend all the spare money for land — there is plenty of it on sale in the county — and then put up cheap buildings, constructed in accordance with modern ideas of hospital proprieties.

Plain wooden structures, not over two stories in height, with no cellars or foundations, save the necessary piers of support. No one roof to cover more than twenty-five, or, at the utmost, fifty beds. Long, narrow — with windows upon both sides in abundance — with the wind blowing under, and around, and over them.

We insist, the wooden barracks employed as hospital wards in the late war, were infinitely preferable to the masses of brick, stone and mortar, built for all time, labeled hospitals, but which are rather charnel houses.

Put up the buildings cheaply enough so that should they become pestilential, notwithstanding judicious care, they may be pulled down or burned up, with no one to lament the waste.

The war experience has taught civilians much in this matter, and we had thought the day of castellated hospitals had gone by. But it would seem that the authorities still think they must adhere to the deplorable uses of antiquity.

Let us have no more "Guy's" — not even any more wings or "lean-tos" to the present Cook County Hospital. Better pull that down, or sell it for a brewery, and have something in accordance with the teachings of modern science.

Let us have no more strangers, or even vagrants, dying in the Armory, Bridewell or station houses, because there is no room for the sick or wounded poor in the hospitals of this great city of Chicago.

Rush Medical College.

THE Annual Commencement exercises occur on Wednesday evening, February 2nd, at the lower lecture room of the College.

The third Annual Reunion of the Alumni Association of Rush Medical College will occur on Commencement day, Feb. 2. The meeting will convene in the lecture-room of the College, at 10 A.M. The annual address will be given by Dr. Ames, president of the Association.

Diplomas will be conferred on an unusually large class.

Portrait of Prof. Gross.

WE are indebted to the enterprising Editor of the Philadelphia Reporter, for a finely-executed engraved likeness of the veteran surgeon and teacher, Prof. S. D. Gross. Subscribers to the Reporter will find it in the second January number, and *artist's proofs* may be obtained, at \$1.00 each, by addressing S. W. Butler, M.D., 115 South Seventh Street, Philadelphia.

Responsibility.

IT is, perhaps, unnecessary to say to the majority of readers that the Editors do not hold themselves responsible for the opinions of correspondents. All that we require of them is, matter of professional interest, written in *good faith*.

All Book Notices, Editorials, etc., the Senior Editor assumes personal responsibility for, unless the authorship is otherwise indicated by name or initial.

Relieved entirely from the cares of publication, we commence the new year with renewed zeal and determination to maintain the JOURNAL in the front rank of medical periodical literature.

Ingratitude.

SOMETIME since, we took occasion to compliment, in warm terms, a very prettily got up compilation (elegantly illustrated) of matters connected with the Hip-Joint and its Dislocations. But it appears, because we took the liberty to call the author's attention to a single glaring instance of failure to give appropriate credit, he has insinuated that we had not read his book.

He should recollect what Sydney Smith said — never read a book before reviewing it, as reading it is apt to *prejudice* you.

Unfortunately, we did read the book referred to, sufficiently to ascertain its real merits, and have nothing to take back or add to what we have written.

Caution.

ALL persons indebted to the JOURNAL, for past subscriptions or advertisements, are cautioned against paying any money to any person therefor except to the undersigned, or his order. The last volume of the JOURNAL came very near to grief, under its then publisher, and the undersigned is making every effort to repair the damages thus sustained.

J. ADAMS ALLEN.

OBITUARY.

DIED — At Davis, Stephenson Co., Ills., on the 7th of October ult., Dr. J. R. Hamill. The deceased was born in Baldwinsville, Onondaga Co., N. Y., March 1, 1828. Read medicine with his brother, A. P. Hamill, and graduated at Geneva. He moved to Stephenson Co. in the year of 1856, and located at Davis, where he was engaged in the practice of his profession until within one week of his death.

Autopsy revealed the cause of his death to be acute inflammation, affecting, principally, the peritoneum duodenum and biliary ducts, caused by biliary obstruction. A large number of gall-stone were found impacted in the common duct, confirming the diagnosis of his attending physicians.

At a special meeting of the Stephenson Co. Medical Society, Oct. 11, 1869, convened for the purpose of taking appropriate action on the death of J. R. Hamill of Davis, the following preamble and resolutions were adopted.

WHEREAS, It has pleased Almighty God, suddenly to remove from among us Dr. J. R. Hamill, in the vigor of his manhood and in the midst of a career of usefulness;

Resolved, That while we bow with humble submission to the will of Him who doeth all things well, we mourn with sincere and heartfelt sorrow the untimely death of a beloved and honored associate.

Resolved, That in our deep affliction, we refer with melancholy pride to the many excellent qualities of mind, and heart of Dr. Hamill, which rendered him a welcome and trustworthy counselor to his professional associates, and a valued friend and adviser to the sick and afflicted. As a physician he was gifted with swift and unerring judgment, rich and varied attainments, deep sympathy for the afflicted, and a profound knowledge of the resources of our art. Untiring in the discharge of his professional duties, he was alike ready to obey the summons of the rich and the distressed calls of the poor and needy. Firm in his convictions, self-reliant, and tenacious of his opinions, he was nevertheless always mindful of the rights and feelings of others. As a man he was generous and just; as a physician zealous and intelligent; as a husband and father, kind and indulgent.

Resolved, That in his death our Society has lost an earnest and valuable member, and our profession an honored and devoted associate.

Resolved, That as fellow-sufferers we tender our sincere sympathies to the afflicted wife and children of the deceased.

Resolved, That a copy of these resolutions be inscribed on the records of this society, and that copies be transmitted to the papers of Stephenson County, and to the CHICAGO MEDICAL JOURNAL, for publication.

B. T. BUCKLY, President.

LOUIS STOSKOFF, Secretary